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THE POLICY ORIGINS OF MIGRATION IN ZAMBIA

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IN ZAMBIA

I

INTRODUCTION

The pattern of migration in post-independence Zambia forcefully suggests that large numbers of villagers perceive a differential between expected urban and rural incomes and that they respond to that differential by moving to the urban areas.

When we speak of the "urban sector" in Zambia, we speak of the copper mining towns in what is appropriately named the Copper-belt Province; of Ndola, the distributive and administrative center for that province; and of the major towns of the Central and Southern Provinces: Kabwe, a lead and zinc mining town and the headquarters of Zambia railways; Lusaka, the national capital; and Livingstone, formerly the national capital, and now the site of Victoria Falls, an important tourist center. These towns form a string of urban centers along the major railway that bisects Zambia from south to north. Because of this, we will adopt the local usage and refer both to these towns and to the administrative units in which they reside as the "line of rail."

At the time of the last major census before independence (June 1963), the ten urban districts of Zambia contained 22.3 percent of the nation's population. The first post-independence census revealed that by August of 1969, 30.4 percent of the population of Zambia resided in these urban districts. Over the six year period, the urban

population had grown from approximately 778,000 to approximately 1,232,000 people; this represented a growth of about 58 percent, as against an increase of about 16 percent in the national population as a whole. If it is assumed that international migration has had a negligible impact on the population figures and that urban birthrates are roughly similar to those in the rural areas, we can then attribute approximately 40 percent of the change in the urban population to the immigration of persons from the countryside.

An examination of the district level data suggests that the growth of the urban centers was part of a general shift in population to the line of rail in Zambia. In the following table, we sort the census enumerations into categories reflecting degrees of proximity to the urban districts. As we move further from the urban centers, we find decreasing percentages of population growth, thus implying loss of population to the towns. Indeed, noting that the percentage changes in population for Zambia as a whole was 16.2 percent, the population of the more remote districts has grown in size at a rate that implies approximately a 13 percent loss of population due to migration. We further note that this figure declines and takes on positive values as we move toward the towns. Again, this trend in the data implies that there has been a concerted flow of people from the more remote, rural districts toward the line of rail.¹

TABLE 1

<u>Line of Rail Provinces:</u>	Census of June 1963 ('000)	Census of August 1969 ('000)	Percent Increase	Percent Change Attributable to Migration
Urban Districts	778	1,232	58.3	+42.1
Peri-Urban Districts	143	175	22.3	+ 6.2
Rural Districts	594	617	3.8	-12.4
<u>Off-Line-of-Rail Provinces</u>				
All Districts	1,975	2,030	2.7	-13.5
Total Zambia	3,490	4,054	16.2	

Source: Republic of Zambia, Monthly Digest of Statistics, vol. 8, no. 8, August 1972. Lusaka: Central Statistical Office, August 1972. And Mary Elizabeth Jackman, Recent Population Movements in Zambia: Some Aspects of the 1969 Census (Master of Science Dissertation, University of Zambia, January 1972).

Note: To compute the percent change attributable to migration, we must assume a uniform rate of natural increase throughout Zambia.

This shift in population, we contend, reflects the uneven distribution of economic opportunities in contemporary Zambia. The cause of the differential in well-being between the urban and rural sectors is the pattern of economic development in the country -- a pattern that existed prior to independence in 1964, and that has been exacerbated since that time. It is to this pattern of development that we now turn.

II

ECONOMIC BACKGROUND IN THE COLONIAL ERA

The Private Sector:

The differential between the line of rail and the rest of the country finds its origin in the investments in mining in Central Africa in the early twentieth century, and from the series of private investment decisions that resulted from the founding of the mining industry.

The first commercially viable mine in Zambia was the Broken Hill Development Company, a lead and zinc mining company located in Broken Hill and owned in part by the British South Africa Company (BSA). The mine was developed in the early 1900's; but its progress was hindered by the lack of transport. The BSA, however, held monopoly rights to the construction of railways in British Central and Southern Africa as well as to the minerals in that area. As a result, the company found it profitable to invest in the extension of a rail link to Broken Hill in 1906; as a major shareholder in the companies that controlled the two industries, the BSA was in a position to capture both the benefits to the mines from the provision of rail transport and the benefits to the railways of the demand for transportation services from the mines. It therefore backed the investment.

The rail link from Rhodesia to Broken Hill was but the first stage in the construction of the line of rail. The link to the Congo border came soon after. In the early 1900's, the Union Minière already had mines under production in Katanga, and it needed smelting coke from the BSA's mines at Wankie; moreover, the Congolese mines required a rail outlet to the sea until the completion of their own railway to the coastal ports of Angola. On the basis of an agreement with the BSA, the Congolese firm was granted permission to link the Broken Hill rail line with the Congo border in 1909. With the

development of the copper mines in Northern Rhodesia in the 1920's, this portion of the railway itself became profitable, handling the outward flow of copper to the sea and the inbound shipment of coal to the copper companies. The railways therefore constructed spur lines to the various copper mines in the 1920's and early 1930's and their construction signalled the completion of Zambia's line of rail.

While the BSA subsequently divested operation of the railways to an independently incorporated firm, the mining companies and railways continued to maintain mutually advantageous agreements. Thus, the mines agreed to contracts with the railways that included penalty clauses to insure the use of the railways for the export of ore, while the railways offered in exchange highly favorable shipping rates to the mines. In addition, the mining companies repeatedly loaned funds to the railways at favorable terms for the purchase of rolling stock and the upgrading of capital equipment.²

Just as the mining sector had called forth investments in the railways, so too did it call forth investments in other sectors. Among the first of these was agriculture. Farming initially developed from the line of rail in the 1920's, and the principal market for the major agricultural products of that time -- maize and beef cattle -- were the copper companies of Katanga. The extension of the tobacco market from the Rhodesias in the late 1920's gave the farmers a source of revenues apart from the mines. Nonetheless, the mine market continued to consume a major share of the agricultural produce. Thus, according to Baldwin, in 1937, "the mines purchased 80 percent of the beef consumed in the territory, and even in 1959 the mining areas consumed 50 percent of the total livestock slaughtered for commercial markets." At that time, the mines also purchased about 25 percent of the internal maize sales by commercial farmers.³ The mines, and the creation of the demand for food associated with their development, thus gave the initial impetus to the formation of commercial

agriculture and remained major consumers of its output.

It should be noted that the centers of agricultural production themselves clustered along the railways. The primary reason was that the companies and the government realized that farming could most profitably be undertaken along the railway and promoted European settlement there. The government legalized the alienation of land to farmers along the line of rail under freehold conditions which offered security to farm investments; these terms were not offered for other areas of the country, which were left largely under conditions of native tenure, and where the duration of leasehold agreements was too short to warrant major investments. The effect was to provide a legal underpinning to what market forces already had guaranteed -- the restriction of highly capitalized farming to the narrow central band of Zambia, proximate to the railway. This would but add to the growing disparity in economic activity between that area and the rest of the nation.⁴

Highly profitable mineral production created the incentive for investments in other sectors. Among the most important of these was the power industry. We have already seen that a primary motivation for the construction of the railway was to provide the mines access to Wankie coal. But the collieries quickly proved insufficient to meet their needs, and the companies soon invested in alternative energy sources. The first such venture was a hydroelectric facility at the Mulungushi River in 1925; the second, a dam at Lusemfwa, was completed during the Second World War. Following the war, the mining companies collaborated in the development of an integrated electrical supply, the Rhodesian-Congo Border Power Corporation, and partially linked their energy grid with that of the Union Minière. This was but a temporary expedient, however; for afterwards, the companies invested heavily in the construction of the Kariba hydroelectric dam. The dam was begun in 1955 and began supplying power in 1958. With its completion came the end of the

formation of the power industry in the pre-independence period in Zambia -- an industry which sold over 60 percent of its output to the mines.⁵

The growth of the mines, the railways, the power industry -- all these developments in the industrial sector entrained further private investment. For example, the creation of new hydroelectric capacity made profitable investments in the cement industry in Northern Rhodesia; with the backing of the Commonwealth Development Corporation, a facility for producing cement, largely destined for the Kariba Dam, was constructed outside Lusaka. In addition, a series of firms grew up about the mines: engineering services, construction and mechanical repairs, and the manufacture of steel and metal products utilized by the mining companies. By the 1950's, the mines had also become the largest single purchaser of acids, chemicals, and quarry products in the country and a principal purchaser of printing services and wearing apparel. As Baldwin wrote concerning the mid-1950's, "There are few domestic manufacturing activities left to be counted, once the local industries from which the copper companies make significant purchases are enumerated."⁶

Aimed as they were at supplying the mines and the urban consumer market which the mines had created, it is not surprising that these industries concentrated in the mining towns along the line of rail. Thus, in a census of industrial and manufacturing establishments shortly after independence, the new government found that over 95 percent were located on the line of rail.⁷ Naturally, the distribution of employment opportunities followed the same pattern. Just prior to independence, including the public sector, over 80 percent of the jobs were located in provinces on the line of rail. But nearly 60 percent of the population lived in the more remote provinces.

TABLE 2
Employment and Population, 1963

	Employment	Percent of Total	Population	Percent of Total
Line of Rail Provinces:				
Copperbelt	119,720	46.7	544,200	15.6
Central Province	59,590	23.2	505,500	14.5
Southern Province	34,750	13.5	466,300	13.4
Total, Line of Rail	214,060	83.5	1,516,000	43.4
Other Provinces	42,230	16.4	1,974,800	56.6
Total	256,290	99.9	3,490,000	100.0

Source: M. D. Veitch, "Employment and the Labour Force, Regional Analysis," typescript, n.p., 21 July, 1970, table 1.

Note: Percentages will not total because of rounding.

For a rural population wanting to become better off in pre-independence Zambia, the urban sector was therefore an attractive place to which to move. Adding to the disparity between the urban and rural areas and reinforcing the incentive to migrate was the conduct of the public sector.

The Public Sector:

It is not uncommon, indeed it is characteristic, of the public sector that it will undertake investments that profit-maximizing individuals would ignore. Public goods are one category of such investments, and of course the Northern Rhodesian government did furnish the public

goods associated with all governments everywhere: law and order, education, roads, and other services. Another category of such investments are investments in sectors where the returns are below the market rate of return, but where noneconomic incentives make these allocations desirable from the government's point of view. One incentive for the production of "suboptimal" investments is a conception of the public good; this gives priority to allocations in sectors which, while economically marginal, are nonetheless highly valued in terms of the official ideology. Another incentive is the need for political support. Just as price signals call forth allocations from private decision-makers, so too do political signals, such as votes, call forth allocations from public officials.

In Zambia, the major sphere in which investments produce less than the market rate of return is, of course, the area off the line of rail. And the colonial government did have incentives to invest there. Its ideology was that of a protectorate, and it was concerned with the promotion of the well-being of the African population, most of whom lived in the rural areas. It officially endorsed the Passfield Memorandum, which defined the interests of the black Africans as paramount.⁸ Given that the majority of the Africans remained in the rural areas, this point of view implied a budgetary priority for investments.

For the greater part of its existence, however, the government of Northern Rhodesia had few funds for investment in any sector. The depression of the 1930's deprived the government of revenues with which to do more than maintain the barest essentials in public services; for the duration of the recession, it confined its functions largely to the maintenance of law and order and to the collection of taxes. No sooner did the recession recede than the government was overtaken by the Second World War; and during the war, it was compelled to reorder its budgetary priorities to conform to the needs of the metropole.

In practice, this meant that the government surrendered much of its revenues in the form of interest-free loans for the war effort to Great Britain and utilized most of the revenues that did remain for the mobilization of its populace rather than for development purposes.

It was not until the post-war era that the government was in a position to commit significant amounts of public funds. It set forth its goals in 1947 in a Ten-Year Development Plan. The plan restated the government's commitment to its protectorate role; its determination to advance the interests of the largely non-urban, non-industrial African population; and therefore its commitment to making significant public investments in the rural areas. In the sphere of education, 11.8 percent of the planned expenditure was to go to African education, and thus necessarily primarily to the rural sector. A full 20 percent of the planned capital expenditures was to go to agriculture, rural marketing, forestry, and veterinary services, while involving European farmers, these activities nonetheless also impinged upon the primary productive activity of the African population. And an additional 11.5 percent was aimed at rural development activities per se, and thus clearly was intended for investments outside of the urban sector. Altogether, the plan unambiguously assigned a full 33.4 percent of its expenditures to the rural areas; and in other budgetary categories, such as health, communications, building, and public works, it earmarked funds for activities that also involved Africans off the line of rail.⁹

It was thus the intention of government to allocate public funds in the areas ignored by the private sector, and thus partially to offset the disparity in the opportunities for economic well-being that had developed between the urban and rural sectors. This commitment was restated a decade later in a supplementary plan specifically aimed at the development of the Northern Province (now Northern and Luapula Provinces). The plan called for an exceptionally high level of

expenditure in areas thought to be particularly poor by comparison with the urban centers, the level of relative poverty having been signaled to government by the magnitude of labor migration from these areas.¹⁰

The colonial government did not exist in a vacuum, however. It operated within a constitutional order that vested influence over its decisions to certain constituencies in the protectorate. Its major constituency was of course the immigrant-settler population which had been attracted to the country by the economic opportunities created by copper mining. Naturally, given their reasons for being in the territory in the first place, these settlers largely confined themselves to the line of rail.

TABLE 3

Province	1946 ¹		1951 ²	
	Number of Europeans	Percent of Europeans	Number of Europeans	Percent of Europeans
Line of Rail Provinces				
Copperbelt	11,725	53.8	10,027	27.0
Central	5,867	26.9	20,454	55.1
Southern	2,450	11.3	4,779	12.9
Total	20,042	91.9	35,260	95.0
Other Provinces	1,756	8.1	1,871	5.0
Total	21,798	100.0	37,131	100.0

Source: (1) Northern Rhodesia, Report on the Census of Population of Northern Rhodesia held on 15th October 1946 (Lusaka: Government Printer, 1949).

(2) Northern Rhodesia, Labour and Mines Department, Annual Report for the Year 1951 (Lusaka: Government Printer, 1952).

Note: Totals will err by a factor of rounding.

Under company rule and in the early days of the colony, the settlers had little formal power; they were merely consulted in the making of public decisions. Later, asserting their rights as British citizens and as taxpayers in the territory, the settlers gained representation through a Legislative Council, and thereby the ability to make their views known to government. At the end of the war, the settlers of Northern Rhodesia joined the rest of the subjects of British colonies everywhere in gaining a devolution of the powers of self-government to the local level. They secured the right to make the Executive Council of government responsible to the settler majority in the Legislative Council; gained "ministerial" control over several administrative departments in the government; and, through what amounted virtually to a parliamentary party, obtained the power to approve appointments to posts in charge of government departments which they themselves did not control. The colonial administration thus found itself dependent upon the settlers in the formulation and implementation of public policy.

The African community, by far the more numerous, did not receive similar weight in the constitutional structure of the territory. While settler representatives entered the Legislative Council in 1924, the first representative of African interests was not appointed until 1930; and even then, the representative of African opinion was a white settler and not a black African. While Europeans had participated in elections to the Legislative Council since 1925, Africans virtually could not vote until the elections of 1959. The settlers had long had the right to organize politically; until after World War II, African political parties were virtually illegal in the territory. And the structures that did exist for registering the views of Africans -- the local and provincial councils -- culminated in an advisory body, the African Representative Council, rather than in an agency vested with actual control over the making of policy.¹¹

The consequences for the fulfillment of the government's protectorate commitment were predictable. Despite its moral obligation and stated commitment to investments off the line of rail, government in fact revised and amended its program of public expenditures in favor of the line of rail communities and the European population that resided therein. Perhaps the most dramatic illustration of this is in its 1953 revision of the Ten-Year Development Plan. A comparison with the original program as set out in 1947 reveals that while the absolute amount of the capital expenditure program increased by a factor of four, the amounts aimed at the African rural dweller declined. Not counting loans to local authorities, the amount unambiguously assigned to the rural sector fell from £4.36 million to £2.9 million; even counting those payments, the rural dweller's unambiguous share of the proposed capital expenditures fell from 33.4 to 15.4 percent of the total appropriations.¹²

The main reason for the proportionate decline in rural expenditures was the vast increase in the planned expenditures upon economic infrastructure for the urban industrial economy. The expenditures for public works and communications increased by a factor of six and increased proportionately from slightly less than a quarter to slightly more than a third of all slated investments. The relative decline in rural expenditure also resulted from the increase in funds for the provision of social services to urban dwellers. Thus, there were vast increases in spending in African housing -- such expenditures were made only in urban townships and compounds and never in the villages; slight increase in expenditure on water development; and the appearance for the first time of significant expenditures on public utilities. These changes in financial priorities thus signaled a shift in the commitments of the public sector -- a shift from a pattern of public expenditures that would reduce the disparity in the standards of living brought on by the pattern of private investments to a pattern of public investment that

would complement the investments made by private entrepreneurs. Like the expenditures of private investors, public allocations now went to the area of highest return. As Baldwin states:

"Rapid expansion of the economy after the war created pressing needs for capital in the monetary sector. To take full advantage of these new capital opportunities, greatly enlarged outlays on roads, housing, medical facilities, power, water and the like, were urgently needed, and gave every indication of yielding a higher short run return than spending on uncertain rural projects. The government soon shifted the main part of its development efforts toward the monetary sector."¹³

The role of the constitutional structure in producing this concentration of public investments along the line of rail is strikingly underlined by the vast increase in funds in the one area specifically restricted to Europeans -- the area of European education. Planned expenditure for this single item increased from £300,000 to £5.1 million. The effect of the constitutional order upon the patterns of public investments is again best captured by Baldwin:

"For years government officials deplored the extent of this imbalance between economic development and the monetary versus the subsistence sector. But, under political pressures of the moment, the Legislative Council invariably responded to the wishes of the European electorate and channeled most of the funds available into the money economy. Without significant political representation, the rural African population, understandably, was seriously neglected."¹⁴

The Special Case of Agriculture:

Before terminating our discussion of the colonial era, it would be well to discuss the policy with the greatest implication for African rural dwellers, the policy towards agriculture. Two aspects of this policy are vital to our discussion. For one, the policy aimed overwhelmingly at providing services and facilities to the commercial farmer; as such, it provided the higher rate of return to farming along the line of rail than elsewhere in Zambia. For another, in so far as the policy impinged upon the subsistence

farmer off the line of rail at all, it did so in a way that discouraged his emergence as a farmer whose rate of return offered a standard of living commensurate with what he could obtain in the urban sector.

One aspect of this policy has already been discussed: The policy toward land. To gain higher returns to agricultural production, and thus prosperity in the rural sector, naturally requires investments in agriculture; these can only be made where the investor is certain of his ability to recover the return from his outlay. To secure farming improvements, rights over land must therefore be clearly and enforceably vested; and to secure capital flows from commercial sources, risks to creditors must be minimized by using titles stating the enforceability of these rights. As we have noted, government acted so as to establish these legal pre-conditions for the capitalization of agricultural production primarily along the line of rail. And in so restricting the extent of its legal reforms, government promoted the containment of highly productive farming to this region.

A similar bias was to be found in the provisioning of agricultural services. For example, the government provided marketing facilities in the form of statutory boards for the line of rail provinces, but not for the remote areas. The reason was that marketing services have significant economies of scale, and so can most economically be provided for the areas of large agriculture production; but the government's economic orientation toward the provision of these services served only to reinforce, not to offset, the disparities in well-being between the central and peripheral areas of the country.¹⁵ Where government did act as a buyer for the smaller farmers -- primarily through the rural marketing service, in the areas adjacent to the line of rail -- it recovered the cost of transport by adjusting prices for the distance to the line of rail depots; by contrast, government agencies could follow a policy of uniform pricing for the more centrally located commercial farmers. Once again, the effect of government policy was

to make the small-scale farmer bear directly the costs associated with their less favorable location, rather than to cushion them from these costs, and thereby redistribute economic resources to the more distant areas.¹⁶

A similar areal bias existed in the provision of credit and extension services. Commercial farmers on the line of rail could secure credit from the Land Bank, a statutory agency of the government, or from commercial sources. Both accepted the farmers' fixed assets and titles as security for loans, and therefore were willing to accept the risks involved in farming investments. Naturally, the small-scale farmer off of the line of rail could furnish neither kinds of security, and therefore was excluded from using existing credit facilities.¹⁷ The government also provided research and extension facilities, but again, concentrated these in the central region of the country. Thus, for example, research stations were located in Mazabuka, Monze, Mount Mukulu, Lusaka, and Salisbury (Rhodesia) and investigated crop rotations, fertilizer application, pest controls, and hybridization; in few instances, however, did they extensively investigate the applicability of these techniques to soil types, climatic conditions, and methods of production characteristic of the farming areas off the line of rail. Even where the results were transferrable -- as with the important innovation of hybrid maize in the mid-50's -- the innovations diffused at a much slower rate to the small-scale farmer, for the extension staff was concentrated in the areas of high agricultural production. The best example of this effect is in the case of beef production. The research institutes conducted extensive work in cross-breeding beef cattle for commercial production, attempting to introduce into imported breeds the resistance to local diseases developed in indigenous stock. Important progress was made in developing new cattle types, but the benefits of this innovation were overwhelmingly captured by the commercial farmers; for the Department of Veterinary

Services confined its activities to the centers of commercial farming. As Dresang concludes, "Governmental efforts to increase agricultural production did not extend beyond the European community."¹⁸

The government thus maintained agencies and services designed to increase productivity of agriculture and thereby increase rural incomes, but confined these to a narrowly defined sector: the sector where output was already high, where the costs of production were relatively low, and where significant capital had already been invested by private individuals. Few of these efforts by government did much to increase the levels of income of the rural dwellers.¹⁹

There is one last significant aspect of government policy that deserves note, and this is the area of price policy. This policy can best be discussed in terms of one of the major local crops, maize. The main purpose of the government price policy was to maintain a cheap and abundant supply of food to the urban consumer. Government performed this function by subsidizing the marketing agencies for differentials between the earnings they realized in selling maize at the low consumer price and the expenses they incurred in purchasing the product from farmers. In the post-war period, when the government was committed to a policy of agricultural development, the marketing agencies encouraged production by maintaining high producer prices; the result was a consistent trend of oversupply for the local market, and a continuing loss by the marketing agencies as they sold the surplus production on the relatively depressed world market. The government offset this loss with public funds, and the resultant subsidy to the farmer has been estimated at approximately £2.5 million over the period 1955 to 1957.²⁰ The effect of this policy, however, did not extend beyond the commercial farming sector. For the vast majority of African farm families lived in regions not serviced by the statutory marketing agencies that benefited from the government's expenditures.

The more remote farm families faced an entirely different pricing policy. Rather than being subject to a policy whose main purpose was to encourage maximum production, even at the cost of expensive surpluses, they faced a policy whose goal was to generate regional self-sufficiency in production. The scale of provincial production was such that private entrepreneurs would not furnish transport and marketing facilities, nor, as we have seen, was government itself willing to absorb the cost of marketing, either by "exporting" produce from the more remote farms to the line of rail or by "importing" produce to these regions should local production fail to meet local demand. The government therefore set prices at a level designed to make each remote region self-sufficient in food. The result was that as local farmers became more productive and thereby generated a surplus, the government reduced the price offered to local producers. Local producers were penalized, rather than rewarded, for increasing output. They therefore had little incentive to invest in increased production in agriculture.²¹

The primary effect of this price policy was to place a limit on the increase of rural earnings through the increase of agricultural production. An important secondary effect was to prevent regional specialization and the realization of gains from trade to be got through comparative advantage. By emphasizing self-sufficiency, rather than "export," as a goal of pricing policy in the more remote regions of Zambia, the government therefore perhaps discouraged the concentration of investments in the production of crops which could most efficiently be grown. And it prevented the realization of the income effects that could be gained had persons been able to purchase products which were being grown in the areas where they could most cheaply be produced. The effect of the policy was, perhaps, both to make goods more expensive to the rural consumer than they need have been, and to keep his level of output below what could have been. The off-the-line-of-rail farming families were therefore placed at a grave disadvantage.

Evidence for the consequence of the surge of industrialization along the line of rail and of the retardation of the development of small-scale farming in the colonial period is to be found in the estimates of income for the early 1960's. For example, the government in its Draft Development Plan of 1962 noted that "in 1960, the total production for cash sale of the 400,000 African farming families in the rural areas was less than £2 million, that is less than £5 per farming family. This production would have been much smaller but for the production of the peasant and improved farmers, some of whom were able to earn as much as £150 to £200 in cash income from the sale of their crops."²² By contrast, the average urban wage earner was receiving approximately £100, and the mineworkers were earning approximately £250 a year in 1960. The natural result of this differential was that many persons left the villages for the more remunerative cities. By 1955, it is estimated, over 11.4 percent of Zambia's African population had moved to the urban areas along the line of rail, making Zambia the third most urbanized of the black nations of Africa. And by the 1960's, over 20 percent resided in these urban centers.²³ The trend toward the line of rail was firmly in motion by the time of independence in Zambia.

Toward the End of the Colonial Era:

The primary reason for leaving the rural areas, we have argued, was to be better off. But not everyone could make themselves better off through the market for labor. For many -- those too old, those too young, and the women -- migration was an unattractive alternative. For others, income was but one of the things they sought from life; attachment to friends, relatives, and village life were also important, and so the alternative of migration was not chosen. In neither case did the rejection of migration mean a lack of interest in greater well-being; rather it simply meant that fulfilling the urban

demand for labor was not a viable means of becoming better off. Many rural dwellers turned to other alternatives as a way of improving their condition. One of the alternatives was politics.²⁴

As is well known, African politics in Zambia, as with African politics elsewhere, was largely urban in origin. The major issue of the nationalist movement was the racial issue; and this was simply most relevant to urban dwellers. Urban Africans took recourse to politics to counter racial biases that had been introduced by Europeans into the urban marketplace. The major such bias, of course, was "the color bar" in the urban labor markets by which European unions compelled employers to artificially lower the returns to African labor; they did so by excluding African workers from the more preferred categories of industrial employment. Some of the more explosive moments in the early history of African politics in Zambia arose over this issue and are treated at length elsewhere.²⁵ Similar patterns characterized the consumer market. For European consumers, through legislation and social pressure, excluded Africans from large sectors of the commercial trade; and this, in turn, provoked a further series of demonstrations and boycotts that sparked the nationalist drive in the 1950's.²⁶

The central purpose of the nationalist movement, however, was not so much to alter the allocations made through economic markets, but rather to alter the distribution of public goods by government. The provision of public goods was radically biased in favor of the Europeans. The government provided secondary schools and hospitals for resident Europeans, for example, that compared favorably with those throughout the world.²⁷ But for Africans, there was but a single secondary school that offered pre-university training, and the quality of medical care available to the average African was well below that which the average European could expect to receive. The European population, of course, reaped the benefits created by these services, be it in terms of qualifications for better jobs and higher earnings or in terms of sheer life expectancy.

It was the anger of the Africans at having been excluded from these benefits that gave the major impetus to the formation of political organizations. The demands of the nationalists therefore focused on founding the constitutional structure which would vest control over the allocation of public services in the hands of the African majority. And the history of the progress in African politics is marked by the series of constitutional revisions that increasingly secured the transfer of public power to African hands.²⁸

Be the issue job discrimination, consumer boycotts, health care, or education, the very fact that the significant private markets existed on the line of rail, and that the majority of public facilities were based there, was sufficient reason to insure that the nationalist movement concentrated its efforts in that region. Nonetheless, the central issue -- that of racial discrimination -- was an issue that could lead to a coalition of all Africans, and the rural dwellers were able to align behind it. They had many reasons for doing so; and strongly among them was their desire to protect and increase their level of well-being.

This desire was reflected in one of the primary fears that motivated opposition to colonial rule in the rural sector; fear of the further alienation of land to European settlers. The transformation of conditions of tenure along the line of rail had led to the termination of native rights to land in that area, and the wholesale exclusion of rights of settlement in what had formerly been African territory.²⁹ On a far smaller scale, similar alienations of land took place in the outlying regions of Zambia, if only for the formation of mission stations or for the establishment of trading areas in the boma townships.³⁰ As noted by students of nationalist history, the fear of further transfers of the major economic asset of the African community constituted a major basis for the opposition to colonial government. Knowledge of the extent of land alienation in other white-dominated

nations gave credibility to these fears, and the nationalist organizers were quick to make use of them.

Equally important was the opposition to taxes. Taxes everywhere have sparked political protest; and, given the record of history, it should cause no wonder that opposition to taxes should have been a fundamental basis for the overthrow of the colonial regime. As Crane Brinton writes in his study of the great revolutions of Western Europe, "It is interesting to note . . . that they all had in common a financial origin, all began as protests against taxation."³¹ In Zambia, this also was the case. In part, the protests against taxation were directly that; one of the culminating acts of the nationalist rebellion was the burning of the hated fitupas, the tax booklets in which an African's tax payments were receipted, and without which he was liable to arrest. More generally, however, the protests took the form of resistance to local native authorities, which served as the taxing agency in the rural areas. As the native authorities retained a portion of the tax receipts which they collected, and as they could, with government permission impose new taxes, they exacted revenues from the rural residents with considerable vigor.³² They enforced the capitation taxes on all working age males. They charged license fees for almost every conceivable source of rural cash income: hunting, fishing, store owning, produce marketing, and so forth. They fined persons engaged in profitable enterprises, such as beer brewing. And through the power to fine, they compelled expenditures that most persons would voluntarily not have undertaken -- expenditures on the fines themselves of course, and further expenditures, if only in time and effort, to correct the penalized activity, be it failing to construct houses up to statutory standards, to install legally required sanitation facilities, or to prepare proper drainage in village areas.

These taxes and fines represented a considerable drain on the resources of the rural dwellers. In 1938, for example, the average rural capitation tax was 7/6d., and the best estimates of the average subsistence income per capita for that year is in the area of £4.³³ Thus, 10 percent of the total earnings were taxed, which of course represents a much higher percentage earnings of the cash earnings of the rural dweller. When the magnitude of the licenses and fines are included, the diversion of fiscal resources from the rural dwellers to government assumes even greater magnitude. In the eyes of many rural dwellers, the primary services returned -- law and order under foreign rule -- did not fairly compensate for their loss of well-being. They felt worse off. And so they allied with the urban sources of nationalism and organized in opposition to the local native authorities and to the alien government. The rural rebellion was thus in large part a quest for a higher level of well-being -- a level of well-being that many could not secure in the labor market and that most would prefer not to have to secure by supplying their labor to urban industry.

III

THE POST-INDEPENDENCE PERIOD

The Urban Alternative: Industrial Investment in the Post-Independence Period:

There is no reason to go into the intricate series of moves that led to the transfer of power to the hands of the African majority. Suffice it to say that in October of 1964 Zambia became an independent state, and that it was ruled by UNIP, a party which gained governmental power by successfully competing for votes against other parties under conditions of universal adult suffrage.³⁴ In the pre-independence

elections, UNIP received 69.1 percent of the votes cast. Its mandate was from both urban and rural constituencies. It won all of the urban electoral districts. But the nature of the distribution of seats under the conditions of universal suffrage was such that of the 55 seats which UNIP held in parliament, 41 were from the rural areas. The shift in the locus of electoral power to the Africans, and to the rural sector, was thus complete.

TABLE 4
1964 Election Results
Main Roll

	<u>UNIP</u>		<u>ANC</u>		<u>TOTAL</u>
	Rural	Urban	Rural	Urban	
Contested	19	12	10	0	41
Uncontested	22	2	0	0	24
Total	41	14	10	0	65

Source: Parliamentary Elections Office, "Analyst of Polling, Northern Rhodesia General Election 1964," Mimeo. 28 January 1964.

Note: Districts counted as urban are those in the ten major urban centers in the copperbelt and on the line of rail, plus immediately adjacent peri-urban districts (e.g., Kafironda, Ndola West).

While the demands of the constituents of the governing party were many and various, they coincided unanimously at one point: that the African majority was to utilize its newly attained hegemony in the public sector to make itself better off. The government therefore committed itself to a program of rapid economic development through investments in the formation of domestic industry.

The new government was in a position to make such investments on an unprecedented scale. For at the time of independence,

the quantity of capital funds available to the state burgeoned dramatically. Funds that had hitherto gone to the federal government reverted to Zambia when it attained the status of an independent political authority. Moreover, with independence, the Zambian government renegotiated to its benefit the royalties agreement with the British South African Company and so improved public access to the wealth that was generated by the mining companies.³⁵ Lastly, the time of independence coincided with a favorable and major upswing in the international price of copper; having stood at £230 per ton of electrolytic wirebar on the London Metal Exchange at the year before independence, the price of copper doubled in the following year. The result was a surge in government revenues from company taxes and mineral royalties, plus new earnings from an "export tax" which government imposed to capture the windfall resulting from the soaring price of copper.³⁶ All told, in the first fiscal year of independence (1964-1965), the government was able to lay claim to an estimated K84,422,000 in recurrent revenues, a figure which represented an increase of over 300 percent from the actual revenues of the last fiscal year prior to independence.³⁷

TABLE 5

Copper Price: Annual London Metal Exchange Mean Cash Price per
Tonne of Electrolytic Wire Bars

<u>Year</u>	<u>£</u>
1962 - - - - -	-230
1963 - - - - -	-230
1964 - - - - -	-346
1965 - - - - -	-464
1966 - - - - -	-541
1967 - - - - -	-411
1968 - - - - -	-517
1969 - - - - -	-611
1970 - - - - -	-589
1971 - - - - -	-444

Source: Mindeco, Mindeco Mining Year Book 1971 (Kitwe: Copper Industry Service Bureau, n.d.).

In pursuing rapid industrial growth, the government devoted an average of 60 percent of its annual expenditures to the formation of capital.

TABLE 6
Central Government Expenditures 1969/65 to 1969

	(Millions of Kwacha)					
	1964/65	1965/66	1966/67	1967	1968	1969
Current Spending	101.4	123.9	162.5	102.0	216.4	223.2
As percent total	78.5	66.4	64.5	61.3	53.3	60.8
Capital Spending	27.7	62.7	89.5	64.5	189.8	144.2
As percent total	21.5	33.6	35.5	38.7	46.7	39.2
	129.1	186.6	252.0	166.5	406.2	367.4

Source: Charles Harvey, "The Control of Inflation in a Very Open Economy: Zambia 1964-67," Eastern African Economic Review, Vol. 3, No. 1 (June 1971), p. 44.

The rate of private investment, while not matching that of the public sector, nonetheless was also high; for, as can be seen in Table Seven, the national level of gross fixed capital formation by public and private investors remained at roughly 20 percent of the gross national product over the same time period.

TABLE 7
Gross Fixed Capital Formation as Percent of
Gross Natural Product, at 1965 Market Prices

	1964		1965		1966		1967		1968		1969	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
	Km.		Km.		Km.		Km.		Km.		Km.	
Gross Fixed Capital Formations	82.7	15.0	120.4	18.5	163.7	22.2	178.4	23.0	200.1	24.5	181.0	18.2
Gross Natural Product	477.3		604.4		682.8 ¹		726.1 ¹		768.7 ¹		951.0 ¹	

Source: Central Statistical Office, Monthly Digest of Statistics, Vol. 8, No. 6 (Lusaka: CSO, June, 1972).

Note: Adjusted for changes in the terms of trade.

The magnitude of investments was therefore unprecedentedly high in post-independence Zambia; the pattern was roughly what would be expected, given the structure of the Zambian economy. Most were in enterprises which sold their output principally to the mining industry. Many of these were by way of import substitution. Baldwin, writing of the mid-1950's, states: "Of the main supplies used for operational purposes in the copper mines -- explosives, timber, coal, furnace and firebricks, mill balls (used to crush ore), rails and fittings, and steel -- about 15 percent of the timber is cut within the territory, and a large share of the mill balls are manufactured in Northern Rhodesia. The rest of the articles are imported."³⁸ This list predicts strongly most of the major investments in the post-independence period. For, among the major achievements of the first planning period (1966-1971) were the construction of the nitrates and explosives industry which sold most of its produce to the mines; the development of major

local deposits of coal, almost all of which is consumed on refining and smelting operations; and the creation of a clay products plant in the manufacturing of clay pipes and firebricks, most of which again are consumed by the mines.³⁹ In addition, the metal working group of industries, which produced the mill balls, fittings, rails, etc. grew rapidly over this period. As stated in a review of the first planning period:

"The total number of industrial establishments increased . . . [by] 30 percent. The largest among existing industrial units belongs to the metal working group -- largely subserving the mining industry and economic activities connected therewith."⁴⁰

So too, the cement industry, which expanded its capacity by 80 percent principally by creating a new plant on the Copperbelt itself; and the construction industry, which in 1965 received more payments from the mines than any other domestic industrial sector, nearly tripled its capacity over the first planning period. Nearly completed at the end of the first planning period was a new oil refinery, which would sell much of its output to the mines. The creation of industries that transferred the profits associated with provisioning the mines to the domestic economy thus characterized the major pattern of investments in the post-independence period.

In many of these projects, the government played the part of an entrepreneur. For example, through its Indeco group of industries, it was a founding and major shareholder in the nitrates and explosives industry, the cement industry, and the clay and firebrick factories. Nonetheless, direct investment by government was but a minor part of the overall level of public investment at this time. Dresang indicates that from the time of independence to 1967, only 19 percent of the government's capital expenditure was in the form of direct investments;⁴¹ and, for the fiscal year 1970, despite the government's increased holding in enterprises as the result of the 1969 economic reforms, direct investments by government represented only 14.7

percent of its capital program.⁴² Much more significant were the government's expenditures on economic infrastructure, which were designed to underpin a high rate of return on private capital formation and thus produce further investments by private entrepreneurs. For example, the government made major capital outlays to modernize and upgrade the equipment of the national railways. It facilitated the purchase of supplies and equipment abroad by creating a transport fleet and depot facilities for trade with the coast, resurfacing the road system to the coastal ports, and expanding the harbor and warehouse facilities in the port areas. It expanded the energy supply available to industry by laying an oil pipeline to the coast, and by investing in major increases in the supply of hydroelectric power. By Dresang's estimates, between 1964 and 1969, 55 percent of the government's capital expenditure went to the formation of infrastructure of this kind.⁴³

Both the magnitude and pattern of these investments by private enterprise and by government had major consequences for Zambia. The magnitude led to enormous increases in the domestic product of Zambia, which grew from approximately K 465 million in 1964 to nearly K 1 billion in 1969. The pattern, however, insured that while the economy underwent a revolutionary transformation in its size, it did not alter significantly in its structure. As seen in Table 8, one of the most striking features of economic growth in post-independence Zambia was the radically greater magnitude and the seemingly unchanged distribution of the origins of the domestic product.

TABLE 8

Industrial Origin of the Gross Domestic Product

At Factor Cost
(K Million and Percent)

Sector	1964		1969	
	Amt.	%	Amt.	%
Agriculture, Forestry, Fishing	53.3	11.5	67.0	6.8
a. Commercial Farming	17.0	3.7	16.7	1.7
b. Other Farming, Forestry, Fishing	36.3	7.8	50.3	5.1
Mining & Quarrying	220.8	47.5	405.4	40.9
Manufacturing	28.2	6.1	73.6	7.4
Construction	20.0	4.3	55.2	5.6
Electricity & Water	5.0	1.1	14.6	1.5
Trade	45.8	9.8	102.4	10.3
Fiscal Institutions & Insurance	0.6	0.1	35.4	3.6
Real Estate	10.6	2.3	29.5	3.0
Transport & Communication	20.6	4.4	65.2	6.6
Government Administration	21.2	4.6	45.8	4.6
Community & Business Services	19.6	4.2	68.1	6.9
Personal Services	19.6	4.2	28.1	2.8
Gross Domestic Product at Factor Cost	465.3	100.1	990.3	100.0

Source: Ministry of Finance, Economic Report 1971 (Lusaka Government Printer, January 1972), pp. 58, 60-61.

A second major consequence of the high level of investments was an increase in the level of wages. (Table 9)

TABLE 9

Year	African Employees ¹ ('000)	As Percent ¹ All Employees (%)	Index of Output Per Man ² (1964 = 100)	African Employees, Av. Annual Earnings ³ (K)	African Employees, Index of Av. Money Earnings (1964 = 100)	Consumer Price Index ⁴	African Employees Av. Real Earnings (K)	African Employees, Index of Av. Real Earnings (1964 = 100)
1962	231	87	87	302	79.1	101.8	297	81.2
1963	225	87	91	320	83.8	101.3	316	86.5
1964	237	88	100	382	100.0	104.5	366	100.0
1965	263	89	108	428	112.1	103.0	379	103.6
1966	295	91	96	480	125.7	124.5	386	105.6
1967	315	91	106	666	174.4	130.7	510	139.4
1968	325	92	112	789	206.5	144.9	544	149.0

1. Source: Development Division, Office of the Vice President, *Zambian Manpower* (Lusaka: Government Printer, 1969), p. 9.

2. Source: *Zambian Manpower*, p. 9. This index is based on the total expenditures on the gross domestic product at constant prices (with adjustment for rural household consumption) and the average number of wage and salary employees during the year.

3. Source: Republic of Zambia, *Employment and Earnings 1966-68* Lusaka: Central Statistical Office, 1970), p. 6.

4. Source: Central Statistical Office, *Monthly Digest of Statistics*, June 1972 (Lusaka: Central Statistical Office, 1972), p. 49. This version of the indices is for all items, lower income consumption patterns; January 1962 = 100.

The rate of capital formation insured rapid increases in the productivity of labor, which would naturally produce increased wages. The sole exception to the trend of productivity increases took place in 1966, and resulted from the disruption in Zambia's economy occasioned by the disarray in transport services when Rhodesia rebelled against Great Britain. At that time, average wages rose anyway, even while productivity fell. This points to a second major reason for wage increases in the post-independence period: the power of organized labor in Zambia. With the coming of independence and the expectation of enhanced well-being associated with that event, the African working force effected a redistribution of income to wages. And the newly created African government, sensitive to the demands of its constituents that they be made better off, permitted the transfer. Independence brought a last major reason for the increased earnings: the implementation of programs of African advancement. With independence came the opportunity for Africans to use public power to intervene in private industry so as to modify hiring, training, and promotional practices. The government, through Zambianization committees, tax allowances for training programs, expenditures in education, and its control of the board of directors in state industries, achieved an upgrading of the African labor force -- an upgrading that is reflected, in part, in increased rates of pay. For all these reasons, the average earnings of African working men increased appreciably in the year after independence.⁴⁴

If the magnitude of the investments helped to create greater output and higher wages, the pattern of the investments helped to confine these increases to the line of rail. As we have seen, private entrepreneurs seeking highest returns and the government seeking rapid industrial growth -- both invested heavily in sectors which serviced the mining industry or which catered to the demand created by that industry. Naturally, these investments concentrated in the urban areas. The result

was that of the 532 industrial manufacturing establishments that existed in 1969, a full 524 or 98.5 percent were in the line of rail provinces.⁴⁵ The pattern of investment also insured that employment opportunities concentrated on the line of rail, and that the increase in wages which resulted from the high rates of capital formation benefited primarily the line of rail dwellers. Thus, as Table 10 suggests, the Central, Southern, and Copperbelt Provinces, which in 1969 had just under 50 percent of the population, had over 80 percent of the jobs in 1968. And, whereas the average annual private sector wage in the Copperbelt in 1968 was K 954 in money terms, the comparable wage in, say, Luapula Province was K 641.

TABLE 10

African Employment and Earnings, Regional Distribution

	Employment ¹				Population		Percent	Average African ²	
	1966		1969		1969		Population Employed	Annual Money Earnings	
	Total	%	Total	%	Total	%	%	Public Sector	Private Sector
Luapula	5,920	1.9	6,710	2.0	336,000	8.3	2.1	654	641
Northern	12,470	4.2	18,070	5.5	545,000	13.4	2.4	422	485
Eastern	11,650	3.9	13,530	4.1	510,000	12.6	2.6	717	262
Southern	36,740	12.2	33,310	10.3	496,000	12.2	6.7	482	535
Central	86,820	28.6	97,970	29.8	713,000	17.6	11.6	752	754
Copperbelt	135,574	44.8	144,040	43.9	816,000	20.1	15.4	757	954
North-western	5,030	1.6	5,420	1.6	232,000	5.7	2.6	444	291
Western	8,560	2.8	9,250	2.8	410,000	10.1	2.3	522	392
Total	312,764	100.0	328,300	100.00	4,058,000	100.0	-	-	-

Source: (1) Republic of Zambia, Ministry of Development Planning and National Guidance, Second National Development Plan, January 1972 - December 1976 (Lusaka: Government Printer, 1971), p. 172.

(2) Republic of Zambia, Employment and Earnings, 1966-68 (Lusaka, Central Statistical Office 1970), pp. 17-28, 45.

This pattern, as illustrated in Table 10, is precisely what existed in the pre-independence period, and once again underlines the extent to which the economy has been transformed in magnitude, but not in structure, by the new African government.

The Rural Alternative: Public Policy in the Rural Sector:

We have argued that proto-migrants respond to differentials in earnings. It is therefore important to note that contemporaneously with the move toward industrialization, extensive investments were also made off the line of rail, in the rural sector of Zambia. In almost no case were these investments made by private entrepreneurs. The returns to investments in the burgeoning industrial center were such that private entrepreneurs had little incentive for rural investments. Indeed, as in the case of some commercial farmers and rural businessmen, private capital often left the rural sector in the years after independence. Rather, the active financial agent was government, which had reasons for placing a higher priority on the rural investments than would be warranted solely by their economic returns. For one, the ideology of the government, entitled "Humanism," stressed equality of access to the benefits and opportunities to be created by governmental action. As a doctrine, Humanism stressed the equality of man: the dignity and worth of even the most impoverished individual; and the moral superiority of the village which, though poor, nonetheless fostered a respect for man and preserved social harmony and mutual inter-dependence -- the principal virtues extolled by the doctrine's propounder, President Kaunda. As the President once stated:

"Government is vitally interested in participating actively in the economic life of the country. But . . . ALL OUR PEOPLE MUST BE BROUGHT INTO THIS. . . . How can it be done? To be effective we must think in terms of the smallest unit . . . the village.

. . . I must admit that I hesitate to interfere to any great extent with village life as it is today for the very reason that culturally we

may be committing suicide -- we might . . . without being aware of it, destroy some of the best things in our national culture. At the same time, to leave our villages as they are today means stagnation and the last may well be worse than the first."⁴⁶

The government also had strong political incentives for making rural expenditures. A high percentage of the electorate and of the party cadres were from that sector and many had made heavy personal investments -- in terms of time, pain, and opportunities foregone -- to put an African government in power. The government, in time, would be accountable to that electorate, and this political motive insured the rural areas the financial attentions of the public sector.

A last and major reason for the government's investments was the growing realization toward the end of the 1960's and in the early 1970's that its policy of rapid industrialization was not going to be successfully fulfilled without the increased production of agricultural goods. The lag in the rural sector threatened to produce scarcities of food. And this in turn threatened to deplete foreign reserves through the importation of agricultural products and to reduce the profits of industry as a result of wage demands keyed to consumer prices. Both considerations furnished incentives to government to attempt to make agricultural products more abundant.

A. The Initial Commitment:

Zambia became independent on October 24, 1964. The first occasion at which the leaders of the new government publicly met the UNIP workers that placed them in power was at a public meeting in Chifubu on the 17th of January, 1965. The principal theme of the meeting was the extent of the sacrifices that all sections of Zambia must make in the economic construction of the new nation; a secondary, but important, topic was the benefits that independence would bring to

all dwellers of Zambia. As related by one observer:

"The Northern News reported on 18 January that 'The President called on all the unemployed in Zambia to form themselves into cooperative societies and to put their various skills to work on the agricultural and construction projects planned;' President Kaunda declared: 'The money is there and the know-how is there. You can form these cooperative societies' anywhere in Zambia and we shall assist you in getting on.'"⁴⁷

The message rapidly passed down through the party structure and out into the villages. At a rate and magnitude that nearly overwhelmed the administrative capabilities of the new government, local party units organized themselves and their fellow villagers into productive units, be they construction gangs, brick makers, or farmers. They demanded certificates of registration, loans to acquire initial stocks of implements and supplies, and training and extension services. Two thousand applications for registration were received in the first five months of 1965, as compared with five for all of 1964.⁴⁸ Within the year the number of registered cooperatives in Zambia more than doubled; and within two years, the number had doubled again.

TABLE 11

Year	Total Number of Societies	Total Registered Societies	Total Dissolved Societies	Total Membership
1964	220	8	9	43,697
1965	468	264	16	49,724
1966	601	135	2	44,283
1967	875	279	5	52,637
1968	1,069	195	1	52,664

Source: Adapted from Republic of Zambia, Department of Co-operatives, Annual Report for the Year 1968 (Lusaka: Government Printer, 1969, p. 7).

The rural areas, which had failed to attract capital investments from the private market or from the colonial regime, now sought to offset their position of relative disadvantage through the use of political channels. The government, which they had placed in power, offered to back their efforts in productive enterprises; they accepted the offer and held the government to its commitment.⁴⁹

Some of the investments elicited by the cooperative societies were purely financial. For example, the government offered to compensate registered societies for clearing and stumping new land, thereby bringing new acreage into production. Within the first few years, the cooperatives had gained 1.2 million kwacha in this manner.⁵⁰ However, by far the most important investments which they attained were in new public services. Access to these services was not restricted to the cooperative societies; they were available to all rural dwellers. At the initiative of the cooperatives, much of rural Zambia was therefore provided with services for the first time.

The basic idea behind the new services was to perform functions that, under the circumstances, the private market could not perform. One such function was the provision of funds for agricultural investment. Another was the virtual creation of a market: a mechanism for the bringing of the urban demand for agricultural produce to the village level and the supplying of the rural demand for agricultural requisites from urban sources. In institutional form, these services took the form of a rural credit organization and a marketing agency. To underpin its commitment to enhance the income of the rural sector, the government, under intense political pressure, set out to create both institutions.

The Credit Organization of Zambia (CAZ) was formed by Act of Parliament in 1966. While it handled loan applications by small businessmen as well as by farmers, the principal purpose of COZ was to finance rural agricultural production; over two-thirds of

its loans went to small farmers. By the end of 1967 government had lent the organization over 18 million kwacha. This represented an increase in the level of credit available to small-scale farmers on the order of 9 million kwacha by comparison with the period prior to independence.⁵¹ The infusion of funds into rural agricultural production thus rose dramatically under the new African government.

The creation of the marketing agency in the more remote areas was also begun in this period. Late in 1964 the Ministry of Agriculture of the new African government assumed direct responsibility for the Agricultural Rural Marketing Service -- which hitherto had served African farmers on the line of rail -- and extended its facilities to the Northern and Luapula Provinces. In 1965, it reconstituted the agency as a statutory board, entitled the Agriculture Rural Marketing Board, and extended its facilities to cover the Northwestern, Barotse, and Eastern Provinces as well. The Minister of Agriculture, at the inaugural meeting of the new agency, outlined the rationale for the new service:

"It was Government's intention to develop the rural areas, particularly in view of the fact that 70 percent of the population is on the land and, therefore, to improve the lives of the majority of the population of Zambia. . . . He appreciated that the services to be provided in certain areas may prove to be uneconomic, but if Government did not take the initiative to provide such services these areas will stagnate, so that the Government is prepared to give financial support to the poor in order to indirectly support the people. . . . A financial return cannot be expected until [after several years of development in agriculture]."⁵²

The credit organization provided the initial funding; the farmer exchanged these credits for fertilizer, seed, and implements from the marketing agencies to which they also sold their produce. The joint result was the growth of agricultural production in the remoter districts, a growth that is perhaps best indexed by the marketed production of maize, the principal agricultural commodity in Zambia.

TABLE 12

Marketed Sale of Maize, Per Year, by Province

(Standard Bags)

Year	Northwestern Province	Luapala Province	Barotse Province	Total
1964	-	200	-	200
1965	1,100	4,100	300	5,500
1966	1,300	6,800	2,100	10,200
1967	9,900	16,000	5,400	31,300
1968	14,200	22,400	18,600	55,200

Source: Agricultural Rural Marketing Board, "Fifth Annual Report for the Year Ended 31st December, 1968," mimeo, n.p., 1969, p. 5.

Note: The Board is not the primary marketing agency in maize in Northern and Eastern Provinces; there it is but a buyer of the surpluses of co-operative marketing agencies, and so figures for its purchases in those provinces would be misleading estimates of the growth of production.

The bringing into commercial production of the more remote areas of Zambia was but one part of the government's rural development effort. The government also opened up new schools, constructed new hospitals and clinics, and built and paved new roads in the rural areas. All told, there can be no doubt that the new government, capital rich and politically responsive to the African majority, mounted a level of capital expenditure in the rural areas of Zambia that they had never experienced before. Nonetheless, proto-migrants' response to the differential between urban and rural opportunities, and the acceleration of the urban economy in post-independence Zambia -- at a rate in excess of that attained in almost any other developing nation in Africa -- was far greater than that in the countryside. Moreover, all was not well with

the rural development effort. As a result, pressures mounted on government to redouble its rural development effort, even while urban migration continued.

B. The Recommitment to Rural Investment:

The first of these pressures came from the new parastatal organizations themselves. Increasingly, they argued that if the public sector was in fact going to encourage production in areas where private markets did not function, then the government was going to have to offset the real economic costs of this commitment through increased financial outlays. Thus, the marketing agencies contended that they were bringing into the market vast numbers of new producers; that they were distributing seeds, fertilizers, and agricultural implements in areas where the technology of agriculture had remained "unaltered for centuries"; and that in doing this, they were following government policy and so must be adequately financed by government. The economic realities were such, they went on, that at current prices the services they offered could only be furnished at a loss. In short, the marketing agency demanded and got increased levels of subsidization.

As an example of this argument, we can cite their year-end report to government in 1969. As an index of their activities in the outlying areas, the services noted that the volume of "Turnover [in these areas] in 1968 . . . was twenty times that of 1965. . . ." ⁵³ but that since

"Each of the . . . provinces is considered to be non-viable . . . our activities must . . . be subsidized. The amount of the subsidy is subject to annual negotiation. The basis of the subsidy calculated for the years up to and including 1967 did not in our opinion stand up to critical examination." ⁵⁴

They therefore asked for, and got, another and larger subsidy from government for the next fiscal year. In other years, the marketing services obtained further subsidies by making extensive financial commitments for the purpose of farming requisites and crops, and then simply presenting the government with the bill for these outlays. As it reported in one year,

"By the beginning of 1967 it became evident that the operating subsidies for each non-viable province was hopelessly inadequate to do the job . . . and we had the choice of either severely restricting the activities in each province to minute levels or of continuing the operations and incurring losses. . . ."⁵⁵ They chose to do the latter. And, for the next year the marketing sources reported, "In July the [agency] suffered the indignity of having its bankers refuse to meet any checks it might draw. After a period of three weeks, with the height of the maize-buying season upon us during which it appeared that the whole operation might grind to a halt, the Ministry of Finance made available K1,000,000 of K1,500,000 which the [agency] considered necessary for the successful financing of activities for the remainder of the year."⁵⁶

While under pressure from the bureaucracies that it had just recently forged, government was also under pressure from its constituents. Much of this pressure was in the form of vocal criticism by local party units of the performance of the rural development agencies. The local constituents claimed that the organizations were not giving sufficient volume of services. They demanded increased amounts of loans, more convenient arrangements of the delivery of requisites and the collection of produce, lower interest rates for loans, and lighter transport and handling charges by the marketing agencies. In short, the local constituents sought to compel the public sector to bear the full economic costs associated with their position of disadvantage in the market. Thus in 1967 the local farmers in Luapula Province refused to transport their produce to designated pick-up points and instead demanded that the marketing agency collect their goods at their farms; without oxen and wagons, much less motor transport, the farmers could not bear these costs, and instead demanded that they be borne by the more liberally endowed public agencies.⁵⁷ Both as a result, and as a measure of the increase in pressure, we can note the mounting losses of the marketing agencies in the rural sectors as they both increased the volume of their services and passed on fewer of the costs to the rural producers.

TABLE 13
Losses (Profits) by Province of the Agricultural Rural Marketing
Board for the Years Ended December 31, 1967 and 1968
(in Kwacha)

	North Western Province		Barotse Province		Luapula Province		Totals ¹	
	1967	1968	1967	1968	1967	1968	1966	1967
Gross Loss (Profit)	8,490	5,308	13,482	(3,342)	37,026	(25,641)	78,636	48,146
Expenses	77,646	245,268	70,222	168,887	118,256	227,514	195,746	394,870
Subsidy	22,908	52,400	22,910	23,000	17,256	42,600	111,556	111,606
Total Loss	109,044	302,976	106,614	195,229	172,538	295,755	385,938	554,622
								959,983

Source: Annual Report of the Agricultural Rural Marketing Board, Profit and Loss Account, for the Year(s) Ending December 31, 1967 and December 31, 1968.

Popular criticism also focused on the quality of the services which the public sector provided. The local producers frequently, and justifiably, protested that while the volume of the services was increasing, their nature was such that it was doing little good. These criticisms most frequently focused in the rural credit organization. The local farmers received seasonal loans from the credit services and used these to purchase seeds and fertilizer from the marketing agencies. But the flood of applications was such that the credit organization was slow in approving the loans, and orders for seasonal requisites were placed with the marketing agencies far too late in the season for them to adjust their inventories and delivery schedules so as to provision the farmers in time. Loans were made; deliveries did arrive, but they arrived so late in the agricultural season that the rural farmer was often no better off. Indeed, because of the timing of the deliveries, he was often unable to secure a good enough harvest to repay the loans, and so was accumulating debts to the very credit agency that was supposed to improve his economic standing.⁵⁸

The local producers were in no position to utilize market sanctions to upgrade the quality of the services they received. There were no competing facilities that would allow them to transfer their demand to sources of supply that provided better services. It was, after all, the absence of such sources which had inspired the mounting of public services in the first place. As a result, the rural producers had recourse only to nonmarket sanctions: political protest and public dissent.

Most often, this dissent remained purely local. It showed up in complaints to touring officers, petitions by farmers and village groups to boma officials, and in hostile questions posed to the loan and marketing agencies by the regional party officers. At other times, the dissent was sufficiently great that the local political and administrative officials felt compelled to petition en masse to the central government to improve the performance of its local service. Thus, for

example, the public officials of Nchelenge sent the following report to the Ministry of Development and National Guidance, Lusaka:

"The farmers . . . complain bitterly that loans are paid very late in February to May after the cultivation period. In the same way seeds and all farming requisites are issued to farms late . . . thus no farmer makes good use of his loan."⁵⁹

To this report, the local officer of the Ministry of Agriculture added his name and noted bitterly:

"Just as reported in March last year the Quasi-Governmental bodies like . . . [the] Marketing Board and Agricultural Finance Company [the credit organization] frustrated the expectations which we were expecting. Loans and farming requisites were not given to farmers in time and in some cases were not ever given . . .

The Marketing Board also did not give:

7 farmers	5 x 100 lbs.	X mixture [fertilizer]
4 farmers	15 x 25 lbs.	maize seeds
47 farmers	204 tins	groundnut seeds"

Citing his district targets, he concluded:

"Instead of having 500 acres maize we have 400 acres. Instead of having 550 acres of nuts we have 50 acres."⁶⁰

This dissent, however, sometimes spread beyond the purely local level and outside of the channels of bureaucratic protest. It did so when ambitious politicians vied for votes, and aggregated the feelings of frustration behind broader political symbols. At this point, competing politicians translated rural dissatisfaction into the forces of political provincialism in Zambia.

There are numerous instances of this phenomenon. In almost every case, the origins of provincial protest lie with the national level leaders who were seeking higher offices in the governing party; in the post-independence period, promotion to party office led to higher governmental offices as well. To generate and support backing for their candidacies, the claimants utilized appeals to their political constituents, and these invariably stressed the economic disadvantages

of their political "under-representation" at the higher levels of the party and of government -- an under-representation that could be overcome by the solid support of their candidacy.

The first such provincial movements took place in connection with the 1967 elections to the top offices in the governing party -- the first such electoral contests in the history of UNIP. In the course of the elections, the candidates for the top offices allied into two competing slates: one formed by politicians from the Eastern and Barotse Province, and the other by candidates from the Northern and Southern Provinces. The latter slate won, but the former group of candidates continued after the election to propound the appeals they had used from the beginning of their campaigns, that their provinces were financially ignored by the government while the provinces of those who held top office were favored instead. The result was that the governing party became organized into provincial factions, and that these factions became available at election time to rival parties -- parties that threatened to overturn the government itself.

The cogency of this dynamic is best revealed in the case of Barotse. A high ranking official from Barotse, one Mundia, had been expelled from the Cabinet in 1966 for financial misfeasance; in 1967 he joined with a group of minor politicians to form a party in opposition to the governing party -- a party which they named the United Party (UP). UP remained but a minor threat to the governing party until the latter's internal elections in August of 1967. At that time, when many of Barotse's political elite lost their offices in the governing party and therefore in the government itself, UP's claim that Barotse stood to lose out economically in independent Zambia became more cogent. Barotse was in fact poor. It had been the least developed of the provinces under the colonial government.⁶¹ And its heritage of poor roads and poor services, as well as the low initial level

of its existing facilities at the time of independence, made it particularly difficult for government to implement effective development programs in that area. Adding to the problem was the increased unemployment in Barotse that resulted in the large-scale repatriation of labor to the area from the countries to the south, following Zambia's independence and its termination of labor recruiting agreements in the area. These grievances, compounded by the poor performance of the public services developed for rural producers, offered fertile grounds for those seeking votes against the new Zambian government. The series of violent clashes between Mundia's United Party and the members of the governing party led to the banning of the former, but local constituents nonetheless lodged their protest against the economic conditions in Barotse Province; in the 1968 election, eight of eleven constituencies in the province switched from the governing party to the major legal opposition, the African National Congress. Competition within UNIP led to similar movements of provincial dissent in the Northwestern Province, the Eastern Province, and Luapula. While none led to subsequent disaffection to opposition parties, all underlined the fragility of the government's political base and thus the necessity for ameliorating the conditions of life in the rural areas that gave currency to these provincial movements.⁶²

Pressures from its own agencies and the proven capacity of politicians to utilize rural discontent to undermine the position of government -- both factors led in the period 1968 to 1970 to major adjustments by government in its rural development program. In response to these pressures, the problem of rural development moved closer to the top of the government's agenda.

Many of the adjustments were administrative in nature. Thus, prior to the election of 1968, government announced that immediately following the elections it would decentralize the bureaucratic structure of the country. The performance of its departments and agencies,

government officials contended, could be enhanced were they overseen and scrutinized by the political officials who were responsive to the needs and demands of the populace. At the district level, there were to be politically appointed district governors; in addition, each province was to have a minister of cabinet rank in charge of coordinating the operations of governmental agencies in the area. The governor was to be in charge of district development committees, and the ministers, in charge of provincial development committees. The people, through these political officials, were to be able to lodge their complaints with the development committees which could then pressure the administrators to rectify their grievances. The decentralization effort was thus aimed at improving the capacity of the government's administration to deliver the benefits of public programs to the rural areas and to make the public services more responsive to the demands of the rural dwellers. The implementation of these measures was of course contingent upon the reelection of the government to power. Rural discontent, brought to bear through political mechanisms, thus evoked major administrative innovations in support of rural progress.

A second set of reforms, which were implemented shortly after the 1968 election, involved the regrouping of the major services involved in the rural development effort. In his address at the opening of the session of the newly elected National Assembly, the President announced that all of the major departments involved with rural development -- the departments of agriculture, cooperatives, lands, natural resources, marketing, community development, etc. -- were to be combined in one major ministry, the Ministry of Rural Development. This ministry was to coordinate and implement departmental programs aimed at upgrading rural life, and was to oversee the performance of the parastatal agencies involved with the rural development program -- in particular, the credit organization and marketing services.

As part of this reorganization, the government reconstructed both the rural marketing and credit agencies. It also refinanced these organizations and did so in a way that reduced the losses in public revenues that were to be incurred by extending services into relatively unprofitable areas. In both cases, the government combined its services to the economically viable producers -- the commercial farmers on the line of rail -- with the services to the uneconomical village producers; by linking the fortunes of the two sectors under a common set of programs, it, in essence, used the profits generated by the one to offset the losses generated by the other.

In the case of the marketing agencies, the off-the-line-of-rail provinces had been served by the Agricultural Rural Marketing Board and those on the line of rail by the Grain Marketing Board. While the latter organization had consistently operated at a loss, this loss represented largely the difference between the producer and sales price of agricultural commodities -- a difference which government willingly subsidized as a means of keeping the sales prices to urban consumers low. However, the central location of its operations, the efficiencies it could achieve from handling large quantities of supplies and produce, and the expertise it maintained in management, financial, and technical offices meant that the marketing board in fact operated as a relatively efficient and economic organization. When, in September of 1969, the government combined its operations with those of the rural marketing board, it therefore sought to make available to the rural farmers the efficiencies that it achieved in the more productive farming areas. Thus, for example, the line of rail depots were made available for stockpiling and storing fertilizers and seeds prior to distribution to the provinces; orders for imports of farming requisites for the provinces could now be combined with those of the commercial farmers, and so be made more cheaply; transport could, if necessary, be diverted

from the pool available to commercial farmers to the provincial producers; and the accounting and managerial expertise that had been concentrated in developing depots, inventories, distributional techniques for the large-scale farmer were now to be made available for similar purposes to the emergent producers.

The combination of the two services into what was called the National Agricultural Marketing Board [NAMBoard] made it possible to share the superior services of the center with the relatively impoverished services available to the more remote areas. To help finance the operations of its marketing agency, the government then made several decisions, each of which rendered the commercially viable sector of its operations even more "profitable" and offset the losses incurred by its services to the more remote farms. For one, the government continued its policy of making the marketing agency the monopoly buyer of the major commercial crops. For farmers in the outlying provinces, this choice was of little significance as few alternative markets existed. For the commercial farmer, however, the policy had the effect of stabilizing the price of produce. At times of reduced demand, the policy would have been to their advantage. But the late 1960's was a time of radically increasing demand, and the policy meant that the commercial producers had to sell at a cheaper price than they would have otherwise obtained. The gains from the monopoly market therefore accrued to the marketing agency, and helped reduce the losses it incurred by extending its services off the line of rail. As a result of a second governmental decision, NAMBoard became a monopoly supplier of critical agricultural inputs. In 1970 the government literally closed down the major private fertilizer distributing companies, leaving NAMBoard the exclusive supplier of fertilizer and chemical products to the farmer. In part, this measure was taken so as to protect the market for the products of a newly

completed Zambian fertilizer manufacturing plant, and thereby linking the agricultural demand for inputs with newly created domestic manufacturing capacity. But the measure also had the effect of ensuring the marketing agency monopoly profits to be gained from trade in this commodity. The principal benefit to NAMBoard was its ability to dispatch its extension specialists to the outlying areas to advise in the application of fertilizer and chemical products. The provision of this advisory service, rather than price, had been the principal competitive weapon utilized by fertilizer suppliers in Zambia. By moving to a monopoly position vis-à-vis the commercial farmers, NAMBoard could guarantee their continued patronage while reducing the quality of its services, and thereby gain the ability to transfer these services to the smaller farmer.⁶⁴

An analogous pattern was followed in the provisioning of rural credit. Given the uneconomic nature of production in the outlying areas, the rate of default in government investments in rural farming was high; and, given conditions of traditional tenure, the government was unable to recover assets so as to cover its losses, even had remote farmland been of commercial value. As a result, the government sought to improve the actuarial basis of its investments by compelling the participation of the commercial agricultural sector in its agricultural credit programs. In September of 1968, the Ministry of Finance announced that no farmer could obtain credit from commercial banks if he owed money to the government credit organization. As an estimated 95 percent of the commercial farmers had seasonal loans with the credit organization which could not be repaid until harvest time, this meant that virtually all commercial farmers had to turn to the credit organization for all other forms of financing -- financing which they hitherto had sought from private sources. The result was that the organization received a radical increase in the volume of commercially viable loans; and by charging

interest in excess of that charged by commercial sources, it was able to offset in part the losses it incurred by investing in economically unviable agricultural production in the outlying areas.⁶⁵

Despite the government's attempts to revitalize its credit program, the credit organization failed. Its volume of obligations -- for the purchase of farm implements, seasonal inputs, and supplies -- exceeded its ability to collect repayments, and its interest charges on the commercially viable loans simply could not make up the difference.⁶⁶ In 1970, the government there had to assume the debts. The government decided no longer to use rural credit as a primary means of stimulating rural production; rather it sought to increase rural production by manipulating the prices for agricultural inputs and produce.

C The Special Case of Prices:

The change to price incentives was a crucial one. For it struck at one of the core problems that had crippled all efforts at increasing rural production: the absence of sufficient incentives to the village farmer.

In encouraging rural production, the government had emphasized the growing of maize. Not only was this a basic crop in Zambia, but also, successful maize production requires less intensive initial training and subsequent extension support. Land preparation, planting, spacing, weed and pest control -- all were relatively straightforward by comparison with, say, the cultivation of tobacco or vegetables. Lastly, maize was not highly perishable and so could withstand transport to the urban markets from the more remote areas. The marketing and extension services thus encouraged the emerging farmers to plant high proportions of their acreage in that crop.

The principal problem with this policy, however, was that at the same time, the government's pricing policy was running in a

completely opposite direction. As can be seen in Table 14, the government reduced the price offered for maize by the marketing agencies throughout the first several years of independence. Local farmers, who had got credit from government, who had accepted the guidance of its extension workers (often a prerequisite for getting credit), and who therefore planted heavily in maize, found that the prices offered for their produce were declining. Not surprisingly, they also found that it was increasingly difficult to repay their debts to government.

TABLE 14
Price and Output of Maize

Harvest Years	Price (K/200 lbs.)	Marketed Output (Millions of 200 lb. bags)
1963/64	3.70	1.0
1964/65	3.45	2.1
1965/66	3.45	2.8
1966/67	3.32	4.2
1967/68	3.10	4.1
1968/69	2.90	2.7
1969/70	3.20	2.8
1970/71	3.50	1.4
1971/72	4.00	4.4

Source: Alex Tweedy et. al., "Agriculture in Zambia," draft manuscript forthcoming as *Zambian Paper Number 9* (Lusaka: Institute for African Studies, 1973), Tables 6 and 20.

Note: For harvest years, 1st May to 30th April. The price is the line of rail price for Grade A maize.

The fact of independence was itself the principal reason for the change in price and price policy. Prior to independence, the commercial farming, settler population had been an important source of support for the colonial government. It had therefore been able to gain a pricing policy which generated production far in excess of national demand, and the government assisted in disposing of the surpluses on the world market, most frequently at a loss which it helped to offset with the public revenues. By the 1962-63 crop year, maize exports were over 3,000,000 bags -- a figure which was almost double the level of domestic consumption.⁶⁷ With independence, of course, the political base of the government altered, and there was little willingness to use public funds to dispose of surplus production by the European producers. The new government instead changed to a policy of encouraging production to supply only the national markets; and this change, of course, entailed a reduction in the price of maize. The deliberations of the Agricultural Marketing Committee which formulated these recommendations revealed little consideration of their implications for the newly emergent rural producer -- precisely those who were the least able to take refuge in the marketing of alternate crops.⁶⁸

Protests by the agencies involved in the rural development effort, and by local party units who acted as spokesmen for the interest of village farmers, provoked a review of the pricing policy in 1966. The government still opposed increasing the price of maize; most of the benefit, it felt, would be captured by commercial producers, and these in turn would oversupply the market thereby again depressing the prices and once again threatening the emergent producer. Instead, the government chose to subsidize the price of the agricultural inputs sold by its marketing agencies; the subsidy was selective, and applied only to sales in the more remote provinces,

thereby benefiting the government's constituents and the subjects of its rural development policy.⁶⁹

For a variety of reasons, the reduced price of maize had remarkably little initial impact on the level of national production. The primary reason appears to have been the level of insecurity in the commercial farming community. Uncertain as to its fortunes under the new regime, and facing increasingly difficult problems in repatriating earnings abroad, increased levels of wages by local agricultural labor, and more expensive credit, the European farmers changed their patterns of production by shifting away from produce requiring heavy investment and much labor, such as beef production or tobacco, and into crops like maize, which required little of either.⁷⁰ The result in the mid-1960's once again was a level of maize production that far exceeded domestic consumption, and a further decrease by government in the price of maize.

In the late 1960's and the first years of the 1970's, however, the government was compelled to alter its policies. For one, the damage to the government's rural constituency was becoming well known. Loans to rural farmers were not being repaid, protests against the depressed levels of rural income were mounting, and the movement to the cities by increased numbers of village dwellers had become a concerted flow. For another, the depressed level of agricultural production was beginning to threaten the very core of the government's development policy, its commitment to industrialization. The precipitating factor for both these inputs into the pricing decision was the inflation of the mid-1960's.

In the mid-1960's, the tremendous investments mounted by the public sector had begun to take their toll. As reflected in the index of consumer prices [Table 9], increased demand for goods had begun to bid up prices. Several conditions peculiar to Zambia added

to the problem. For one, compounding the effect of increased public expenditure was the increased demand from private consumers -- a demand released by the wage increases obtained by labor in the immediate post-independence period. For another, nearly 50 percent of the government's finances derived from taxes tied to the price of copper and not to the profits of the mining industry; with the rising price of copper, the increases in government revenues did not produce a decrease in private demand, and the level of total demand therefore burgeoned. Lastly, Zambia possessed an underdeveloped economy; the very purpose of the investment program was to generate sufficient capacity to produce goods. Without adequate capacity, industry was unable to supply goods at a rate commensurate with the demand for them. Zambia was therefore highly susceptible to inflation under conditions of high governmental expenditure.⁷¹

Inflation had two effects which are critical to our analysis. For one, coming at a time when for at least one major crop domestic agricultural prices were decreasing, inflation meant that the terms of trade shifted unfavorably against rural producers.⁷² Not only were they often receiving less for this produce; but also, at any given level of earnings, they could purchase less manufactured output. Without commensurate improvements in their levels of production, the rural earnings of farmers declined; and it is known that, at least in the case of the villagers who entered the market through cooperatives, this level of production was abysmally low and not increasing.⁷³ For those just entering production, or thinking about doing so, who lacked the training and equipment to increase their level of output at a rate at least that of the shifting terms of trade, agricultural production was therefore a losing proposition. The effect of inflation was most likely to decrease the incomes of these rural dwellers who had just entered agricultural production and were inefficient; and to cause

many rural dwellers to remain out of commercial production altogether and in the shelter of the subsistence economy. For the sake of its rural policy, the government therefore had a strong incentive to increase agricultural prices.

TABLE 15
Indices of Barter Terms of Trade Between Marketed
African Agricultural Production and
Representative Consumer Goods
(1964 = 100)

	1964	1965	1966	1967	1968	1969
Including marketed fish	100.0	99.6	96.1	102.7	89.1	84.4
Excluding marketed fish	100.0	99.4	96.5	92.3	80.0	74.8

Source: Fabian J. M. Miambo and James Fry, *An Investigation into the Change in the Terms of Trade Between the Rural and Urban Sectors of Zambia*, "African Social Research, No. 12, (December 1971) p. 108.

A second consequence, and one that dominated governmental discussions of the problem, was that inflation produced a radical increase in the volume of imports. The value of goods imported increased from K 142.9 million in 1964 to almost K 400.0 million in 1971. An examination of the imports reveals that by far the most important reason for their increase was the over 300 percent rise in the volume of imported machinery and transport equipment.⁷⁴ This rise was of course consistent with the government's investment program, and thus posed no particular problem to policy makers. More distressing to government was the increase in the importation of agricultural products. While the relative share of agriculture in imports stayed constant at about 12 percent of all imports, the absolute volume of imports more than doubled over this period; and in 1972, for which the figures are not as yet available, the bill for agricultural imports

rose sharply reflecting the emergency importation of maize to offset the short-fall of 1970-71 crop season. The need to import 3.5 million bags of maize in 1971, at a time in which copper earnings were declining as a result of falling world prices and reduced domestic production (due to a major mining accident at Mufulira) severely threatened Zambia's capacity to finance the importation of capital equipment without depleting her foreign reserves. The government therefore saw it as crucial that agricultural production be increased. The threat to Zambia's foreign trade position served as an important incentive to increase the price of agricultural commodities.

The price increases came in three stages. The first was in 1969-1970 and entailed simply a slight increase in the overall price of maize. A second increase was announced for the 1970-1971 crop season, but this time was linked with a "floor price" of K3.20. The floor price ensured that the government and not the rural farmer would directly absorb the price of transport; the marketing services could not adjust prices below K3.20 to take into account the cost of transport or handling.⁷⁵ This of course represented an increase in prices specifically for the outlying farmers. Following large maize imports during that crop year, the government announced even more extensive price changes. For the 1971-1972 season, it raised the floor price of maize to K3.50, and in addition offered a 30 percent subsidy for imports of seed and fertilizer. Both changes were announced well before planting, and so could more effectively be taken into account by agricultural producers.⁷⁶ This series of price increases significantly reversed the decline of national maize production and led as well to a strong revival in the share of the small-scale African producers in the overall crop.

TABLE 16
Total Maize Deliveries to National
Marketing Services
(In '000 standard 200 lb. bags)

Crop Year	Total Bags	African Farming Bags		Subsistence African Farming Bags	
		N	%	N	%
1962/63	2127	839	39.4	N. A.	N. A.
1963/64	1009	354	35.1	"	"
1964/65	2139	797	37.3	"	"
1965/66	2804	675	24.1	"	"
1966/67	4163	1581	38.0	"	"
1967/68	4131	1579	38.2	"	"
1968/69	2748	1024	37.3	123	4.47
1969/70	2791	733	26.3	N. A.	N. A.
1970/71	1371	271	19.8	"	"
1971/72	4140	1631	39.4	"	"

Source: Republic of Zambia, Ministry of Rural Development, Monthly Statistical Bulletin, August 1971, p. 5, and Second National National Development Plan, p. 174.

It is interesting to note how government financed these price increases. It did not pass them on to the urban consumer; rather, it borrowed from its own capital account to make up the difference between the producer and consumer prices of maize. The government in effect redistributed future goods to present consumption; and given that investments in the rural sector can, by and large, only be made by the public sector, it is not unlikely that a large proportion of the benefit of the

subsidy -- the increased consumption level of the urban consumer -- was created at the expense of the generation of future goods for rural dwellers.⁷⁷

IV CONCLUSION

We have thus examined the pattern of development in Zambia, and noted the high rate of capital formation in the industrial and urban sector. We have noted both that the nature of the arena within which public investment decisions get made and the ideology of the decision makers themselves has encouraged a level of investment off the line of rail that is unprecedented in the history of the nation. Political pressures from bureaucracies, the forces of provincialism, and the occurrence of elections, we noted, have led to a continuation of these investments; and genuine fears that the further importation of capital goods could be limited by payments abroad for food have led to the establishment of appropriate incentives for increased rural production.

Nonetheless, as we argued at the commencement of this essay, proto-migrants decide whether to move on the basis of earnings differentials. We know that the investments in the industrial and manufacturing activities have increased both in number of jobs and the level of wages in the urban sector. Both can only have enhanced the attractiveness of the urban sector to those who were contemplating the prospects of departing from their villages. We also know that while the level of rural investment has increased radically, problems associated with the quality of these investments and the pricing policies of government make it likely that the returns to rural production have not kept pace with the rise of earnings' potentials in the urban sector.

We have few direct measures of rural, per capita earnings that would allow us directly to compare the potential for earnings in the rural and urban sectors. We do, however, have some crude estimates. Thus, Cambridge economist H. A. Turner, in his examination of wages and incomes in Zambia, estimated that the average annual earnings, including subsistence, for peasant farmers in 1968 was K 145; by contrast, the average annual earnings for African miners were K 1,300 and those for employees outside the mines, K 640. The increase in real terms in the average annual earnings of the latter two categories of urban wage earners were 35 and 52 percent respectively since 1964. By contrast, Turner concluded, the average annual increase in the real earnings of African peasant families had been but 3 percent since independence.⁷⁸ With such differentials, and with such apparently accelerating differentials, the incentive to leave the countryside was a powerful force in post-independence Zambia.

Much more sophisticated estimates come from a census of subsistence farmers conducted by the Central Statistical Office in 1968. In this census, the enumerators attempted to assign money values to the subsistence product of a national sample of farm families; they assumed that these sales would largely be made outside the publicly sponsored markets. At least two of their results deserve notice. (Table 17)

TABLE 17
Crops Produced by African Subsistence
Farmers, 1968/69, by Province

Province	Acres Per Farmer	Farm Family Size	Value of Six Principal Crops Per Farmer	Per Person
Luapala	2.9	5.09	180	35.4
Northern	5.2	6.43	240	37.3
Eastern	4.5	6.12	280	45.8
Southern	16.8	8.21	340	41.4
Central	11.8	8.18	360	44.0
Copperbelt	4.6	5.80	190	32.8
North Western	3.8	5.30	200	37.7
Western	3.9	7.71	140	18.2
Zambia	6.0	6.51	240	36.9

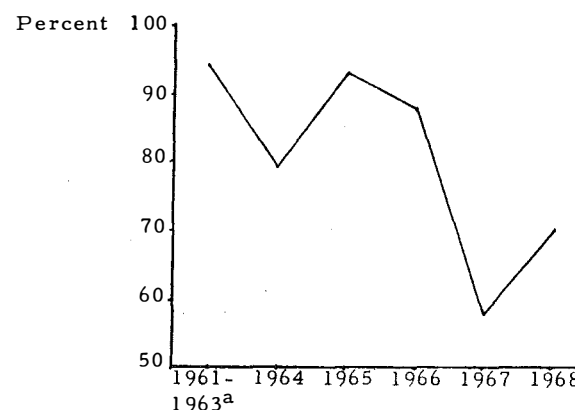
Source: DeVries, "The Importance of Traditional Agriculture in Zambia," Paper submitted to the Agricultural and Natural Resources Committee in the Second National Development Plan, August 1970, p. 3.

Note: The six crops are those most commonly and universally grown by traditional farmers: maize, millet, sorghum, cassava (manioc), groundnuts, and beans.

The first result is that, once again, the farm families in the Central and Southern provinces -- that is, on the line of rail -- do notably better than farm families elsewhere; their proximity to markets seems to have called forth larger acreages and greater productivity. The second is that while the average returns per farmer are much greater than those

calculated by Turner, the differential between the money value of the average output of the subsistence farmer (K 240) and the money value of the average annual earnings of employees in 1968 (K 789) is clearly in the same order of magnitude. For the rural dweller, urban migration has been an attractive alternative in post-independence Zambia.

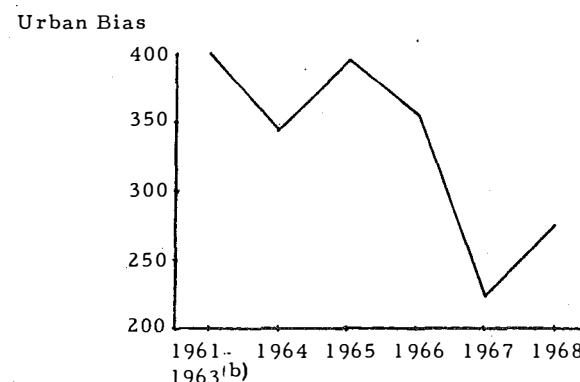
FIGURE 1: Percent of Total, Annual Government Capital Investment That Goes to Urban Districts



(a) Average annual

Source: Republic of Zambia, Estimates of Revenue and Expenditures for the Year(s) 1961-1968, (Lusaka: Government Printer, 1961-1968).

FIGURE 2: Index of Urban Bias in Per Capita District Government Capital Expenditure by Year (a)



Source: Republic of Zambia, Estimates of Revenue and Expenditures for the Year(s) 1961-1968, (Lusaka: Government Printer, 1961-1968).

Note: (a) The urban bias is the ratio between the average per capita capital expenditure by government in urban districts to the average per capita capital expenditures in all the districts in Zambia.

Population estimates for the years 1964-1967 were interpolated on the basis of the 1963 and 1968 censuses. The 1963 census results were used in 1961-1963 and the 1968 census figures were used for that year.

(b) Average annual

FOOTNOTES

1. To assert that these changes reflect a redistribution of population to the urban areas, we must assume that the natural rate of growth of the population is uniform nationally and that international migration is relatively unimportant. There is evidence that neither assumption is strictly valid, but also that the variations in rates of fertility and international migration, save in geographically confined areas, are not large enough to cause great problems for our analysis. See, J. Clyde Mitchell, "Differential Fertility Amongst Urban Africans in Zambia," The Rhodes-Livingstone Journal, vol. 37, 1965 and Patrick O. Ohadike, Some Demographic Measurement for Africans in Zambia, Communication Number 5, Institute for Social Research of the University of Zambia, 1969.
2. This narrative is based upon materials contained in L[ewis] H. Gann, A History of Northern Rhodesia: Early Days to 1953 (London: Chatto and Windus, 1964); R. M. Bostock, "The Transport Sector," in Constraints on the Economic Development of Zambia ed. Charles Elliott (Nairobi: Oxford University Press, 1971), pp. 323-376; Robert E. Baldwin, Economic Development and Export Growth: A Study of Northern Rhodesia 1920-1960 (Berkeley and Los Angeles, California: University of California Press, 1966).
3. Baldwin, Economic Development, p. 141. Also, R. W. Dean, "Changes in Farming over the Past 50 Years," in Farming in Zambia, vol. 5, no. 4, (July 1970), pp. 11-13.
4. For purposes of this essay, we ignore the small centers of commercial farming in Northern and Northwestern Province and the major commercial farms in the Eastern Province. The best discussion of land policy and the several commissions that devised it is contained in Gann, A History, pp. 136-138, 215-224, and 372-373.
5. See Baldwin, Economic Development, p. 38.
6. Ibid., p. 40.
7. Republic of Zambia, Census of Production, 1965 and 1966 (Lusaka: Central Statistical Office, 1968), p. 41.
8. The relevant portion of the memorandum read, "the interests of the African natives must be paramount, and ... if, and when, those interests and the interests of the immigrant races should conflict, the former should prevail." Quoted in J. W. Davidson, The Northern Rhodesian Legislative Council (London: Faber and Faber for Nuffield College, 1948), p. 69.

9. See Northern Rhodesia, Ten-Year Development Plan of Northern Rhodesia (Lusaka: Government Printer, 1947), and Baldwin, Economic Development, pp. 194-196.
10. See Northern Rhodesia, Development Commissioner, Recent Advances in the Northern and Luapula Provinces of Northern Rhodesia, Being a Report on Intensive Rural Development (Lusaka: Government Printer, 1959) and Northern Rhodesia, Report on Intensive Rural Development in the Northern and Luapula Provinces of Northern Rhodesia 1957-1961 (Lusaka: Government Printer, 1961).
11. The best discussion of the changes in the constitutional structure of the territory are given by Gann, op. cit.; Davidson, op. cit.; David C. Mulford, Zambia: The Politics of Independence 1954-1964 (London: Oxford University Press, 1964); Robert I. Rotberg, The Rise of Nationalism in Central Africa: The Making of Malawi and Zambia, 1873-1964 (Cambridge, Massachusetts: Harvard University Press, 1965); and Margaret Rouse Bates, "UNIP in Post-independence Zambia: The Development of an Organizational Role," Ph.D. dissertation, Department of Government, Harvard University, 1971.
12. See Baldwin, Economic Development, pp. 194-196 and Dennis L. Dresang, "The Zambia Civil Service: A Study in Development Administration," Ph.D. dissertation, Department of Political Science, University of California at Los Angeles, 1971, pp. 51-55.
13. See Baldwin, Economic Development, p. 196.
14. Ibid., p. 201.
15. These marketing agencies included the Cold Storage Board, the Tobacco Board and the Grain Marketing Board. The main exception to my argument is again the Eastern Province, where statutory marketing agencies did help to market the tobacco and groundnut crops.
16. See J. Hadfield, The Marketing of African Agricultural Produce in Northern Rhodesia, Agricultural Bulletin no. 18 (Lusaka: Government Printer, n.d.); NAMBoard, "A Short History of the Rural Marketing Department," paper prepared for the Agricultural and Natural Resources Committee of the Second Natural Redevelopment Plan, mimeo, 1971; and "The Grain Marketing Board's Role in Rural Marketing," in Farming in Zambia, October 1968, pp. 11-12.

17. An exception were the farmers in the peasant farming schemes, who received credit from deductions levied by the rural marketing service. At its height, this scheme contained about 2,500 peasants. See James Hadfield, Report on the Peasant Farming Scheme, 1960-1961 (Lusaka: Ministry of African Agriculture, Economics and Markets Advisory Branch, September 1962) and note 19 below.
18. See Dresang, "The Zambia Civil Service," p. 42.
19. Again, the areas of intensive production in the Eastern Province were an exception. Also, it may be countered, the peasant farming scheme was an important exception. However, the scheme was small. In 1955 it involved a mere 651 farmers, at a time when there were approximately 400,000 farm families; and in 1961, it involved 2,565 farmers, or less than 1 per cent of the farm families. And even in the case of this small set of highly privileged small-scale farmers, the government was able to do little to upgrade their relative economic standing in comparison with persons in the urban industrial sector. Thus, Hadfield, in his evaluation of this scheme, reported: "Sales per acre of main crops grown are very low. Only 2.6 bags of maize and 1.8 bags of groundnuts were sold from each acre of crops grown. Though Peasant Farmers have taken some steps up the ladder from subsistence agriculture, in this respect they have not taken very many." (Hadfield, op. cit., p. 17). He went on to note, "a distressingly large number of Peasant Farmer incomes are low: ... about 34 per cent were under £25. This is clearly a serious state of affairs. In this Territory, in 1962, an average African male worker in town earned about £120 a year; an average African mine worker gets over £250 a year, and mine wages are still rising rapidly." (Ibid., p. 24).
20. Baldwin, Economic Development, p. 154.
21. See J. Hadfield, The Marketing of African Agricultural Produce and Bastiaan de Gaay Fortman, "Zambia Markets: Problems and Opportunities" in Constraints, ed. Charles Elliott, pp. 205-210.
22. Northern Rhodesia, Draft Development Plan in the Period 1st July 1961 to 30th June, 1965 (Lusaka: Government Printer, 1962), p. 6.
23. Donald G. Morrison, Robert Cameron Mitchell, John Naber Paden, and Hugh Michael Stevenson, Black Africa: A Comparative Handbook (New York: The Free Press, 1972), p. 162. This source defines an urban center as a population centre of 20,000 or more.

24. An argument analogous to what we are presenting here is provided by Albert O. Hirschman in Exit, Voice, and Loyalty - Responses to Decline in Firms, Organizations and States (Cambridge: Harvard University Press, 1970). Hirschman analyses a problem which is highly analogous to the one with which we are dealing: what determines whether a consumer utilizes market as opposed to political means for maximizing his utility? By Hirschman's reasoning, one of the primary factors determining this choice is the person's elasticity of demand; when it is low, a consumer will not significantly alter his consumption of a good which is declining in quality (or increasing in price), but rather will continue to consume it at former levels while existing political pressures to improve its quality (or lower its price). By the reasoning we provided in chapter one, we can note that many rural dwellers will have a low elasticity of supply of their labor to the urban sector, even while the quality of life or the levels of income available in the rural sector may be declining. Rather than decreasing their "consumption" of village life and migrating to town, they instead may remain and organize politically to improve the quality of life in, or the income yield by the rural sector.
25. See Elena L. Berger, "Labour Policies on the Northern Rhodesian Copperbelt, 1924-1964." Ph.D. dissertation, Nuffield College, Oxford University, 1969 and Robert H. Bates, Unions, Parties, and Political Development: A Study of Mineworkers in Zambia (New Haven: Yale University Press, 1971).
26. These boycotts are best discussed in A.L. Epstein, Politics in an Urban African Community (Manchester: Manchester University Press for the Rhodes-Livingstone Institute, 1958) and Robert I. Rotberg, The Rise of Nationalism.
27. Indeed, they were designed to do so. Their purpose was to lower the costs of migration to Central Africa for skilled workers from Europe and thereby give firms a better chance of competing successfully for skilled labor.
28. These are best discussed in David C. Mulford, Zambia; Robert I. Rotberg, The Rise, and Margaret Rouse Bates, "UNIP in Post-independence Zambia."
29. Again, see Gann, A History, pp. 136-138, 225-219, 372-373.
30. See, for example, Henry S. Meebelo, Reaction to Colonialism: A Prelude to the Politics of Independence in Northern Zambia, 1893-1939 (Manchester: Manchester University Press for the Institute for African Studies, University of Zambia), p. 224. All told, 11.7 million acres

- out of a total of 185.8 million acres, a total of 6.3 per cent was appropriated by the state: 3.5 million acres of it as freehold, 2.5 million as leasehold, and 5.7 million acres in the form of game and forest reserves. The fact that much of this land was commercially the most valuable meant that the extent of the alienation was more severe than the raw figures alone would suggest. These figures are from Alex Tweedy et al., "Agriculture in Zambia," draft manuscript forthcoming as Zambian Paper Number 9 (Lusaka: Institute for African Studies, 1973).
31. Crane Brinton, The Anatomy of Revolution (New York: W.W. Norton and Company, Inc., 1938) p. 48.
 32. The fact that many were in poor financial condition resulted more from the poverty of their tax base, the failure of government to capitalize them adequately, and their desire to provide services at a level exceeding their means, than from their failure to collect revenues from the rural populace.
 33. Northern Rhodesia, Report on Native Taxation (Lusaka: Government Printer, 1938), p. 3 and Baldwin, Economic Development, pp. 134-135. In 1924-1925, almost a full 25 per cent of the Crown's receipts were from native taxes alone; in 1930, the figure was approximately 10 per cent (Report on Native Taxation, p. 3).
 34. The one exception was the retention of 10 reserved or upper roll seats, in effect for Europeans. These were created to allay the fears of Europeans that their interests would be unrepresented in the post-independence Parliament.
 35. The best discussion of this is contained in Richard Hall, The High Price of Principles: Kaunda and the White South (New York: Africana Publishing Corporation, 1969).
 36. The export tax levied at 40 per cent of the price of copper in excess of £300 per ton; below that price, the tax did not operate. A good review of the sources of public revenues is Charles R. M. Harvey, "The Fiscal System," in Constraints ed. Charles Elliott, pp. 153-189.
 37. Republic of Zambia, Estimates of Revenue and Expenditure in the Year 1st July 1965 to 30th June 1966 (Lusaka: Government Printer, 1965), p. 7.
 38. Baldwin, Economic Development, p. 39.

39. Republic of Zambia, Ministry of Development Planning and Natural Guidance, Second National Development Plan, January 1972 - December 1976 (Lusaka: Government Printer, pp. 19-20).
40. Ibid., p. 20. This source reveals that the number of establishments in the metal working group rose from 98 to 171 in the first planning period. See also, Normab Kessel, "Mining and Factors Constraining Economic Development," in Constraints, ed. Charles Elliott, pp. 259-268; Michaël Faber, "The Development of the Manufacturing Sector," Ibid., pp. 299-322; and A. Young, "Patterns of Development in the Zambian Manufacturing Industry since Independence." East African Economic Review vol. 1 no. 2, December 1969, pp. 29-38.
41. Dresang, The Zambian Civil Service, p. 120.
42. Many of the industries acquired by government as part of the economic reforms yielded profits to government over and above the costs of acquisition. The figure in the text represents the proportion of capital expenditure in 1970 devoted to loans to the Ministry of State Participation for Indeco Enterprises, to the Ministry of Finance for Findeco, and to the Ministry of Rural Development for the Rural Development Corporation. Republic of Zambia, Financial Report for the Year Ended 31st December 1970 (Lusaka: Government Printer, 1971).
43. Dresang, The Zambian Civil Service, p. 120.
44. There is much debate over the Zambianization programs, with serious accusations leveled at their supposed "tokenism." These accusations focus on the managerial power given high-level African employees rather than on their salaries, so our point still stands. See Michael Burawoy, The Colour of Class on the Copper Mines: From African Advancement to Zambianization, Zambian Papers no. 7 (Lusaka: Institute for African Studies, University of Zambia, 1972). A review of the period of the first national development plan reveals, "In 1964 the average wage of an expatriate was about nine times that of an African, whereas in 1970 it was about six times ..." (Second National Development Plan, p. 10).

The major documents pertaining to wages policy in this period are Republic of Zambia, Cabinet Office, Report to the Government of Zambia on Incomes, Wages, and Vices in Zambia (Lusaka: Government Printer, 1969) and Republic of Zambia, Development Division, Office of the Vice President, Zambian Manpower (Lusaka: Government Printer, 1969).

45. Second National Development Plan, p. 172.
46. Dr. K.D.Kaunda, Humanism in Zambia and a Guide to its Implementation (Lusaka: Zambia Information Services, 1968), p. 31.
47. C. Stephen Lombard, The Growth of Co-operatives in Zambia 1914-1971, Zambian Paper Number 6, Insitiute of African Studies, University of Zambia, 1971, p. 18.
48. Ibid.
49. The government's sensitivity to its position is revealed by C. Stephen Lombard who wrote: "In accordance with its promise [to back co-operatives], Government allocated certain resources, particularly financial ones, to co-operatives in the form of subsidies (like 1.2 million in stumping subsidies), loans and grants. In addition, Government broke away from conventional co-operative practice in providing that it would not be essential for members of new groups seeking registration to subscribe share capital..." (Ibid. pp. 18-20).
50. Ibid.
51. Charles M. Harvey, "Financial Constraints in Zambian Development," in Constraints, ed. Charles Elliott, pp. 139-140.
52. NAMBoard, "A Short History of the Rural Marketing Department," A paper submitted to the Agricultural and Natural Resources Committee of the Second National Development Plan, 1971, p. 5.
53. Agricultural Rural Marketing Board, Fifth Annual Report [of] for the Year ended 31st December, 1967 (Lusaka: mimeo, 1968), p.5.
54. Ibid., p. 8.
55. Agricultural Rural Marketing Board, Fourth Annual Report [of] for the Year ended 31st December, 1967 (Lusaka: mimeo, 1969) p. 1.
56. Agricultural Rural Marketing Board, Fifth Annual Report, p. 2.
57. Cited by Bastiaan de Gaay Fortman, "Zambia Markets: Problems and Opportunities," in Constraints, ed. Charles Elliott, p. 212.
58. I accumulated material in support of these contentions in my study of local records in Nchelenge District, Luapula Province.

59. Minutes of the Nchelenge District Development Committee, 5th March 1971, File ADM /4/6, vol. II, Nchelenge District Offices, p. 6.
60. Ibid., p. 7.
61. Gerald L. Caplan, The Elites of Barotseland 1878-1969, A Political History of Zambia's Western Province (Berkeley and Los Angeles, California: University of California Press, 1970).
62. For a discussion of these movements, see Robert Moltero, "Sectionalism in Zambia," in Politics in Zambia ed. William Tordott, (Manchester: Manchester University Press, forthcoming); Robert Rotberg, "Tribalism and Politics in Zambia," Africa Report, vol. 12 (December 1967), pp. 29-35; Ian Scott and Robert Moltero, "The Zambian General Elections," Africa Report, vol. 14 (1969), pp. 42-46; Ralph A. Young, "The 1968 General Elections, Parts I & II," in Zambia in Maps, ed. D. Hywel Davies (London: University of London Press, 1971), pp. 52-55; and Margaret Rouse Bates, "UNIP in Post-independence Zambia: The Development of an Organizational Role," Ph.D. dissertation, Department of Government, Harvard University, 1971.
63. President's Address on the Opening of the First Session of the Second National Assembly, 22nd January 1969, Hansard No. 17, pp. 41-42.
64. See, Times of Zambia, November 12, 1971 and Farming in Zambia, vol. 5 no. 4, July 1970, p. 3.
65. See the discussion in Commercial Farming, October 1968, pp. 21-23.
66. Tweedy estimates the rate of repayment on loans by the Credit Organization by commercial farmers at 70 to 90 per cent and by village farmers as "varying from virtually zero to about 30 per cent in the more successful provinces" (Tweedy, op. cit., pp. 81-82). A government sponsored study of the co-operative societies found an average rate of repayment to COZ of 30 per cent (G. Olund and J. Russel, "Survey of Farming Co-operatives," mimeo, Ministry of Rural Development, March 1970, p. 3).
67. See the discussion in the Ministry of Agriculture, Review of the Operation of the Agricultural Marketing Committee During the Year ending 30th June 1965 (Lusaka: Government Printer, 1966), p. 2 and the same publication in the year ending 30th June, 1967, p. 21.
68. Review of the Agricultural Marketing Committee During the Year ending 30th June 1965.
69. Review ... for the Year Ending 30th June 1967, p. 3.

70. See the discussions in R.A.J. Roberts and Charles Elliott, "Constraints in Agriculture," in Constraints ed. Charles Elliott, pp. 269-297; Charles Elliott, "Humanism and the Agricultural Revolution," in After Mulungushi: The Economics of Zambian Humanism, ed. Bastiaan de Gaay Fortman (Nairobi: East African Publishing House, 1969), pp. 115-143; and Review ... for the Year ending 30th June 1967.
71. See the discussion in Charles Harvey, "The Control of Inflation in a Very Open Economy: Zambia 1964-1969," Eastern African Economic Review, vol. 3 no. 1 (June 1971), pp. 41-61.
72. See Fabian J.M. Maimbo and James Fry, "An Investigation into the Terms of Trade Between the Rural and Urban Sectors of Zambia," African Social Research no. 12 (December 1971), pp. 95-110.
73. G. Olund and J. Russel, "Survey of Farming Co-operatives."
74. Republic of Zambia, Monthly Digest of Statistics, vol. 8 no. 8 (August 1972), pp. 19 and 58.
75. Farming in Zambia, vol. 6 no. 1. October 1970.
76. Zambian Commercial Farming, May 1971, p. 10.
77. In 1972, the government planned to pay K 6.5 million to keep the price of mealie meal (maize meal) down while paying increased producer prices; this was done by paying a K1.10 subsidy per bag of mealie meal, or about 25 per cent of its price. See, Debates of the Fourth Session (Resumed) of the Second National Assembly, no. 31a of the Daily Parliamentary Debates for Tuesday, 5th December 1972, p. 16.
78. Republic of Zambia, Cabinet Office, Report to the Government of Zambia on Incomes, Wages and Prices in Zambia: Policy and Machinery, by the International Labour Office, United Nations' Development Program, Technical Assistance Sector (Lusaka: Government Printer, 1969), p. 9.